Radioactive Material Regulator Training

Certified Public Manager Project

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South Carolina Department of Health and Environmental Control

Bureau of Radiological Health

Division of Radioactive Material Licensing and Compliance

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I. Introduction

The Division of Radioactive Material Licensing and Compliance (the Division) is within the Bureau of Radiological Health as part of the South Carolina Department of Health and Environmental Control. The Division is responsible for the licensing and inspection of the various businesses within the state of South Carolina that utilize radioactive material. The Division operates in accordance with the United States Nuclear Regulatory Commission (USNRC) as an Agreement State. It is responsible for maintaining compatibility with the federal requirements. This compatibility requirement includes proper training of the staff that is responsible for reviewing and inspecting the activities of the licensed organizations. The licensed activities range from medical facilities and hospitals to industrial companies and large plants. The employees of the Division are required to have the training to review and inspect the various facilities. The level of training an employee receives determines his or her qualification level and types of inspections that he or she is allowed.

The Division recently had a federal audit of the radioactive materials program, and while it turned out that the program was deemed compatible, the Division was told that there appeared to be items that were not up to the current standard and needed improvement. This update of our training program is needed to be performed to avoid compromising the long-standing satisfactory and compatible ratings and to prevent penalties against the Division in the future.

II. GAP Statement

Currently, the Division of Radioactive Material Licensing and Compliance has a training program that simply documents the formal training given by the United States Nuclear Regulatory Commission (USNRC). Three years ago, there were additional requirements that the USNRC initiated for training. While the Division attempted to be fully compatible, there were issues that were not met. Some of the items included methods to train employees outside of the USNRC courses and documenting processes and procedures for mentoring and accompanying the inspectors.

III. Data Collection

The data that I have collected consists of our current training document, the USNRC's management directives that begin their organization and requirements, and the Integrated Materials Performance Evaluation Program (IMPEP) document that attempts to standardize the federal inspection of agreement states. Some of the data that I have collected is the information that we have neglected to obtain or maintain, and the average amount of time to approve an individual to take on the next level of inspections and reviewing. This data was necessary to maintain compatibility with the USNRC. We did not previously document on the job training or any of the inspections when the junior employees accompanied a senior inspector or supervisor. It also failed to document the on the job training that was performed in the office that aided the employee in understanding how to perform licensing actions and reviews. Management

is currently prepared to commit to the findings and program that are to come from this project. Now completed, the training program documents levels of training, has management test the employees to progress to upward levels, and documents the accompaniment inspections that will eventually allow an employee to test for the levels. The findings allow a true analysis of the employee's knowledge and skills at each level of training. This project should give the reader a good idea of the program that is now being used for my Division.

V. Data Analysis

The first item that needed to be reviewed was the current training program. At the time of this project's inception, the Division had a training program, but it lacked very much in documentation. The documentation that was kept was a single page that contained each individual's education and his or her radiation safety training prior to employment. In addition, it contained individual lines that indicated the various courses offered by the USNRC that could be taken by Agreement State staff like ourselves. As each qualifying class was taken, the supervisor noted the course taken and the date. One would essentially be considered a fully trained reviewer and inspector with the completion of the courses. The qualification document failed to take inspection accompaniments and on the job training into account.

The only other document that made any reference to the qualifications of the inspectors was the requirement of the supervisors to perform accompaniment inspections to ensure that the training of the inspectors was still adequate and that the inspection quality was still satisfactory. This and the previously described document are

required by the USNRC and are reviewed during the IMPEP which occurs every four to five years.

The USNRC's Inspection Manual Chapter 1248 is an update from chapter 1246, which gave general instructions on the training documentation and the inclusion of some form of continuing education for senior inspectors. The document does not give any specific instructions on how the various Agreement States' programs are to be set up; rather it allows the states to work with what their governments require. Because of this, it was not looked at as a requirement to change any part of the program. It was not until the 2017 IMPEP that it was looked upon as possibly being inadequate. This had the potential to ruin a twenty-year run of IMPEP inspections being satisfactory, adequate, and compatible with no recommendations. While the Division successfully received an adequate and compatible designation, it was nearly the first time in those same many years that it received a recommendation on the review. It was noted that our training and qualification manual program was not compatible to the IMC 1248 that had been issued.

VI. Preparation and Implementation

After the IMPEP and the final review by the USNRC's Management Review Board (MRB), the Division decided on the changes that were necessary for the improvement of the program. The changes would require nearly a complete change from the current training. The result was the Division having to document each type of licensing action as well as each type of inspection that the Division is required to do. We then created a new training and qualification document and created a spreadsheet that

contained all of the items that are required for individuals to become fully qualified. The development and implementation was the basis for my project. The training manual and the qualification journal are included.

For implementation of the program, we addressed the younger members of the staff. Two of our staff have been employed for two years or less. In addition, we currently have two positions that are open. For the two junior employees, we transferred the information that was on the previous qualification journal and put it on the new version. As the two junior employees receive new training, it will be added to the qualification journal. There will be no need to perform the parts of the journal that have already been completed. For the new employees as they are hired, the qualification journal will be filled out from the beginning. The hours of accompaniment, on the job training, and the required USNRC training courses are all documented and signed off by a supervisor. Upon completion of the training, an interview panel consisting of the supervisors is assembled and the employee is asked questions to determine his or her aptitude. The panel then judges to see if the employee is truly qualified to act alone on inspections and will work to qualify as a senior inspector and reviewer.

VI. Evaluation

Upon completion of the project, it was used for the two current employees that are in the process of training and have not yet been designated as senior inspectors and reviewers. The project was reviewed by the supervisors of the program and they agreed that the qualification manual and the qualification journal appeared to be in good order and to be compatible with the updated requirements of the USNRC. The items

were discussed with the entire division and were handed out to the staff. The explanation of the reasons for the changes were understood and agreed upon by the entire division staff and were readily and quickly implemented by the junior staff members. Those staff members quickly began filling out the new manual to address the training that they had up to that point. It appeared that there was an ease of use of the journal and each employee filled out the journal and had his supervisor to sign off on the appropriate parts of the journal. The evaluation by the supervisors on the ease of use of the journal was good. It was agreed that the new manual and journal will be used from that point forward, making changes as the need arises.

VII. Summary

The goal of this project was to create a new manual and journal that would adequately document the training and education of an employee as he or she works to gradually become a senior inspector and reviewer within the division. The adequacy of the project's items was to be compared to the documents and procedures being required by the USNRC. The necessary items to be documented were compiled, a discussion on the requirements was had, and procedures for the education, training, and, accompaniment, approval, and testing were created. The result was two new items for the division that more thoroughly defines the training of an employee as he or she grows within the division. The growth is tracked and approved on a more complete document that no longer lists just their education prior to employment and the USNRC courses, but also documents the on the job training and the interview that gives the

supervisors a face to face session with the employee to better gauge the aptitude of the employee as an inspector and as a license reviewer.

The documents have been put into use by the division and while the manual appears to be easy to understand and to implement, the journal appears to be effective to document the training. At this point, the documents created for this project will be maintained and will be presented to the USNRC at the next mid-term review, which will occur in two years. That will be enough time to completely evaluate the project, as the current employees should complete the training to become senior inspectors and the new employees that we have yet to hire should be approximately half way through their training within that time.

It has been a great learning experience for the author as he has had to review the requirements and to compare them to what we had been using up to the point of implementation and to make new documents that are easy to understand and use. The skills that were taught in the Certified Public Manager classes were also used as it took a good deal of time management to complete the project and to continue the normal day-to-day activities of the job. The supervisors (including the author) had several meetings to ensure that the goal of the project was met and to ensure that the performance measures necessary to insure compatibility with the USNRC were met as well. The team was already built, but we have had changes during the project's development that required team leadership skills and development of a new team to complete the project. This new process for the division also helped the author to implement change management techniques to help the process go as smoothly as

possible. The project has been a great help not only to the division by giving it a new method to develop and evaluate the employees, but to the author and developer of the project by giving him the opportunity to implement tools learned throughout the course of the CPM training.

BUREAU OF RADIOLOGICAL HEALTH

DIVISION RADIOACTIVE MATERIALS

LICENSING AND COMPLIANCE

QUALIFICATION AND TRAINING MANUAL

CONTENTS

01 OBJECTIVES

01.01 To establish training and qualification requirements for South Carolina Radioactive Materials Division (RMD) that are consistent with the National Materials Program.

01.02 To define interim qualification standings to allow a candidate to perform specific activities they prove competent in prior to final qualifications.

01.03 To ensure that RMD staff acquire minimum knowledge and qualification standards.

01.04 To provide standardized methodology for determining that staff meet the minimum knowledge and qualification requirements.

01.05 To establish continuous training requirements for maintaining qualifications.

02 DEFINITIONS

02.01 Candidate - A staff member who is working to complete their qualification journal.

02.02 Category - An area or class of activity that relates to a particular application for which a license may be issued, such as medical, portable gauges, broad academic, irradiator, etc.

02.03 Discipline - A specific health physicist role being sought by a candidate. These are labeled as follows: licensing, inspection, security, decommission, response, or sealed source and device (SS&D).

02.04 Formal Training (FT) - Courses designed and presented by regulatory or subject matter experts. United States Nuclear Regulatory Commission (NRC) training courses are a prime example; they are usually given over a week with a structured learning itinerary.

02.05 Individual Study Activity (ISA) - A training method candidates use to perform a self-study of certain topics. This self-study must then be followed by a discussion about its impact and relation to the RMD’s overall mission.

02.06 Interim Qualification - Transitional qualification status of a candidate to conduct program activities independently in specifically approved areas prior to that individual earning full qualification.

02.07 On-the-Job Training (OJT) - A training method where candidates shadow or participate in activities to develop necessary knowledge and skills.

02.08 Oral Qualification Board - A board established to assess the overall qualification and competency of a candidate to carry out necessary RMD activities. Evaluators will consist of RMD qualified staff members and management.

02.09 Qualification - A status given once a candidate proves themselves a capable member of the RMD HP team. This is earned after 80% or more of the interim qualifications are achieved and a capstone oral qualification board is passed.

02.10 Qualification Journal - The document used by a candidate and RMD management to record completion of training requirements.

02.11 Qualified Staff - A staff member who achieved qualification.

02.12 Refresher Training - Additional training required after qualification that allows a staff member to remain qualified.

02.13 Training Activity -Any activity that is recorded and signed off in the qualification journal. Usually these will be of the ISA, FT, or OJT variety.

03 RESPONSIBILITIES

03.01 RMD manager is responsible for:

(a) maintaining a master copy of all RMD staff members' qualification journals;

(b) validating all signatures and training criteria acquired in the qualification journal;

(c) ensuring staff earn initial qualifications and continued refresher training requirements through routine performance evaluation meetings;

(d) approving training activities outside of those listed in the qualification journal (primarily for satisfying refresher training criteria);

(e) establishing who will serve as training coordinator; and,

(f) providing waivers and exceptions to this training manual and qualification journal.

03.02 RMD training coordinator is responsible for:

(a) assisting candidates and qualified staff with the regular use and tracking of their qualification journals;

(b) communicating availability of NRC or other formal training courses and managing the application process to those courses;

(c) locating key training resources for the RMD staff; and,

(d) organizing oral qualification boards once candidate is ready.

03.03 RMD qualified staff are responsible for:

(a) providing appropriate guidance and tutelage to candidates;

(b) ensuring a candidate understands the minimum amount to consider them to have a working knowledge of a particular training activity;

(c) signing a candidate's training journal once the minimum working knowledge is demonstrated to the qualified staff and only for activities the qualified staff have previously acquired; and,

(d) planning their own ongoing refresher training so they remain qualified.

03.04 RMD candidate responsibilities include:

(a) ensuring reasonable progress towards qualification status (roughly 10% of interim qualifications per quarter so that 80% are met within two years);

(b) maintaining their day to day qualification journal and acquiring qualified staff member signatures where appropriately earned; and,

(c) reconciling the daily use qualification journal's signatures with the master electronic copy maintained by RMD manager on a quarterly basis.

04 POLICY

04.01 Newly hired personnel seldom possess all required knowledge and training to be considered a qualified HP. Therefore, training activities are delineated in the qualification journal to provide a roadmap for candidates in achieving qualification.

04.02 The qualification process aims to develop candidates' level of knowledge and expertise on regulatory, administrative, and technical practices pertinent to each

category of radioactive material users. Along the way, candidates will advance their personal and interpersonal skills to be a valued and contributing member of the RMD.

04.03 It is up to the candidate to seek out and schedule training opportunities to ensure steady progress in the qualification journal. The goal is for all new staff to earn full qualification within two years of being hired. To sit for the oral qualification board, 80% of the interim qualifications need to be acquired. This means roughly 10% of interim qualifications should be achieved each quarter for the first two years.

04.04 State Human Resources' policy mandates that new staff members are on probation for a one-year period; during that time, they will meet quarterly with their supervisors. The RMD manager will verify at these meetings that new staff are receiving the opportunities necessary to meet the qualification goals and that candidates are making satisfactory progress. Additionally, at these quarterly reviews, the RMD manager will update and validate the master electronic qualification journal to the candidate's routinely used day to day journal.

04.05 Candidates may sit for their final oral qualification board once 80% or more of the interim qualifications are achieved. RMD training coordinator will then schedule a panel of evaluators to include at least the RMD manager and two other RMD qualified staff. A successful completion of the board will elevate the staff member from candidate status to being qualified. More specifics about the oral board are laid out in Section 08 – Oral Qualification Board.

04.06 Interim qualifications, specific refresher training options, and exceptions to this training manual or qualification journal process are only authorized by the RMD manager. These items are discussed respectively in the following sections: Section 07 – Interim Qualifications, Section 09 – Refresher Training, and Section 10 – Exceptions.

04.07 Finally, signing a candidate's qualification journal for a training activity is to be taken seriously. This should only be done once the candidate has fully demonstrated the necessary level of knowledge or completion of the activity to the qualified staff member. If it is determined that a qualified staff member signs a candidate's journal prematurely, then any one of the following may be enacted:

(a) the signature is voided and the candidate must redo the training activity;

(b) all signatures by qualified staff member will become voided in that candidate's journal and must be completed over again;

(c) all signatures by qualified staff become voided in every qualification journal ever signed by that staff; or,

(d) qualified staff member may lose some or all of their own qualifications and need to revisit these items in their own training journal.

05 TRAINING ACTIVITIES

05.01 Individual Study Activities (ISA) are intended to be the first and immediately available training activities for a newly hired candidate HP. Most of these should be completed at the very beginning of the qualification process. Through ISA elements, a candidate will establish a base foundation of historical and regulatory knowledge that provides context to future training and assigned HP duties.

05.02 ISA expectations for task completion:

(a) Acquire references relating to ISA (consult NRC IMC 1248, see RMD training coordinator, or discuss with RMD staff to find appropriate training material).

(b) Review reference material until general understanding of ISA topic is acquired.

(c) When applicable, gain login access to necessary tools (i.e., SS&D, WBL, NMED, etc.).

(d) Demonstrate general evaluation criteria are met for the ISA to a qualified staff member.

(e) Receive credit when a qualified staff member feels a sufficient knowledge base on the ISA is met and signs qualification journal.

05.03 ISA evaluation criteria:

(a) Discuss topic item impacts, purpose, and how it pertains to the role of the RMD.

(b) Show knowledge of RMD documents, practices and philosophy relating to the ISA.

(c) Contrast RMD items to NRC equivalents, or show how NRC regulations and policies are directly utilized.

05.04 On-the-Job Training (OJT) is the next most available source of training for a candidate. These training activities give a candidate real working experience and awareness of RMD standards and expectations. Completion of pertinent OJT will be the most heavily weighed aspect of the qualification journal when considering if a candidate is ready for interim qualifications.

05.05 OJT expectations for task completion:

(a) Carry out OJT items under the guidance of a qualified staff member.

(b) Properly prepare by reviewing appropriate procedures, guidance documents, event databases and licensee history.

(c) Discuss evaluation criteria for OJT item with qualified staff.

(d) Once satisfactory performance is displayed, a qualified staff member will sign a particular action as being complete.

05.06 OJT evaluation criteria:

(a) Discuss RMD process for carrying out OJT action.

(b) Describe any special requirements pertaining to the OJT.

(c) Explain what references and electronic tools may assist in carrying out OJT.

(d) Describe physically what was necessary for carrying out OJT (i.e., survey equipment, license file, former inspection results, etc.).

(e) Show understanding for how particular licensee type will obtain, use, and dispose of radioactive materials.

(f) Discuss causes for potential violations the OJT category may exhibit.

(g) Demonstrate competency in completing OJT.

(h) Explain what actions would be taken in the event of a certain scenario.

05.07 Formal Training (FT) is the least readily available and often depends on the availability or resources of other organizations. FT provides a high concentration of targeted learning to enhance a candidate's knowledge and understanding. Though not absolutely necessary, completion of certain FT activities should help justify earning related interim qualifications.

05.08 FT expectations for task completion:

(a) Successfully complete evaluation criteria for formal training.

(b) When course completion is successful, the RMD Manager will be notified by the course administrators and only then will sign the appropriate section of the qualification journal.

05.09 FT evaluation criteria:

(a) Attendance and participation in FT.

(b) Passing of any course exams.

(c) If failure to pass a course occurs then it will be handled on a case by case basis. Sometimes remedial study and reexamination is acceptable. In some cases, the entire course may need to be taken again.

06 QUALIFICATION JOURNAL

06.01 The qualification journal contains a detailed series of training activities as described in the former section. They are chosen to help develop a consistent baseline level of knowledge and understanding for RMD staff.

06.02 Candidates will complete a majority of the activities in the qualification journal within a specific period, usually in the first two years of joining the RMD. To keep this lengthy process on track, the candidates will meet with the RMD manager at regular quarterly intervals until qualification is achieved.

06.03 As stated earlier, qualification can be achieved once 80% of the interim qualifications are attained. This means that a candidate should try to accomplish 10% per quarter over a two-year period to show consistent progress.

06.04 Candidates are responsible for maintaining a daily use version of this journal for tracking of their progress and to allow a place for qualified staff to document completion of training activities.

06.05 RMD manager will maintain an electronic list of accomplished training activities in a master version of the qualification journal for each staff member. This is updated during quarterly reviews with a candidate staff member or during biannual reviews with qualified staff members.

06.06 Every staff member of the RMD will be given their own qualification journal. Qualified staff will use the document to show evidence of exempted training or to document the completion of refresher training. This will also clarify what training activities a qualified staff member may sign off for a candidate; only staff that are waived or showing completion of certain training activities may sign a candidate’s training journal for that item.

07 INTERIM QUALIFICATIONS

07.01 A candidate who has not completed all of the requirements for final certification in his or her qualification journal may obtain interim qualification to independently perform specific work activities.

07.02 This allows the candidate member to start contributing to the RMD much earlier than if they had to wait to complete all training activities.

07.03 The RMD manager will grant the candidate an interim qualification only after:

(a) evaluating the candidate's qualification journal for sufficient completion of related activities;

(b) discussing the candidate's competency with the qualified staff that accompanied or mentored the individual; and,

(c) discussing with the candidate to ascertain their level of confidence and proficiency in carrying out the specified role.

07.04 Approval of interim qualification will be documented in the candidate's qualification journal.

08 ORAL QUALIFICATION BOARD

08.01 The oral qualification board is intended to evaluate how well a candidate can integrate and apply the specific training activity competencies to real world scenarios. It is meant as a capstone exercise where the candidate demonstrates their ability to represent the RMD independently.

08.02 A candidate is eligible to take the oral qualification board once they have attained at least 80% of the interim qualifications within their training journal. At this time, they should approach the RMD manager to seek approval in setting up the board. The RMD manager will then authorize the board and instruct the RMD training coordinator to set up the specifics.

08.03 The RMD training coordinator will schedule a meeting place and time that are conducive to the RMD manager, two qualified staff or more, and the candidate.

08.04 Board evaluators should follow the basic conduct listed below:

(a) Prior to the day of the oral qualification board, evaluators should coordinate questions or scenarios to ensure all pertinent competencies are covered.

(b) Specific questions may be selected from those used in previous boards or new questions can be written. Each question must relate to a certain training activity, license category, or discipline.

(c) Questions should be open-ended to allow the candidate to provide thorough answers that demonstrate understanding of RMD practices.

(d) Technical questions should be limited in number, pertain to realistic scenarios that a RMD HP would be expected to solve independently, and not be the primary focus for board evaluation. Technically based scenarios and examples can be used to determine how well a candidate can translate their technical knowledge into appropriate RMD staff actions; however, they should not be presented purely to determine if the candidate can recall the technical details.

08.05 The board should last long enough to establish whether a candidate is independently competent to act on the RMD's behalf.

08.06 Board members may discuss their thoughts on the candidate's performance in privacy with the other evaluators before revealing their final make a recommendation to the candidate. Recommendation will simply be a pass or fail type evaluation, and all the evaluators must agree to pass a candidate for them to earn qualification status.

08.07 If any number of board members settle on failing a candidate, then they will present them with key areas that showed weakness and need remedial learning. They will also make a recommendation for either a targeted follow up oral board to exclusively test the area of weakness or to hold an entirely new board if deficiencies were prevalent for all subject matters.

08.09 Reexamination boards should focus on areas identified for remedial learning. Identical questions should not be repeated at subsequent boards. The RMD training coordinator will schedule either the same or a new panel of evaluators to conduct the board, but it should not take place sooner than a month after a failure occurs.

08.10 Upon successful completion of the oral qualification board, the RMD manager will fill in the candidate's qualification journal to include the evaluator names and date of completion. At this stage, the staff member will be considered qualified.

09 REFRESHER TRAINING

09.01 Qualified personnel are expected to maintain their qualification by completing refresher training; 24 hours every two years are to be completed in conjunction with performance year periods.

09.02 Refresher training may consist of any related topics, but must be approved ahead of time by the RMD manager for equivalent hours of credit. Examples of training that may be considered include:

(a) incomplete items in qualification journal (potentially 20% may be unfinished at the time of qualification);

(b) advanced FT courses;

(c) directed self-study; or,

(d) preparing a RMD training presentation and discussion.

10 EXCEPTIONS

10.01 Candidates possessing sufficient knowledge to meet minimum requirements, through education and prior experience, may be waived from any and all requirements, including the qualification board itself. Only the RMD manager may grant these exceptions, but will first take into consideration the same criteria used for evaluating interim qualifications.

10.02 Justification for accepting previous experience and training is to be attached to or documented in the candidate's qualification journal by the RMD Manager.

11 PROGRAM REVISIONS

11.01 This manual is periodically revised to reflect changing standards in training requirements for candidates and qualified staff. When new revisions are issued, personnel who qualified under previous requirements will remain qualified, but they must complete necessary training activities as identified by the RMD manager within two years from the date of the revision.

11.02 Candidates in the process of qualifying when new revisions are issued will transition to and complete their qualification under the new version. Candidates will be given credit for all synonymous training activities already completed.

12 REFERENCES

12.01 This training manual was designed to be compatible with the NRC Inspection Manual Chapter (IMC) 1248 which details the National Materials Program's qualification standards. The IMC 1248 should be utilized as a reference in determining other tertiary references and objectives for certain training activities. The following is a list of applicable appendices from the IMC 1248:

(a) Appendix A – Materials Health Physics License Reviewer Qualification Journal

(b) Appendix B – Materials Health Physics Inspector Qualification Journal

(c) Appendix D – Training Requirements and Qualification Journal for Byproduct Material Sealed Source Device Reviewers

(d) Appendix F – Training Requirements and Qualification Journal for Decommissioning Inspectors

(e) Appendix G – Training Requirements and Qualification Journal for Decommissioning Project Managers/Technical Reviewers

12.02 Additional South Carolina or NRC resources may be required for completion of training activities. It is ultimately the responsibility of the candidates to acquire and utilize these resources to their fullest. The RMD training coordinator should maintain a list of applicable resources that would assist the candidates in this process; however, any qualified staff member of the RMD should be able to access necessary materials to support independent HP work.

Appendix A

AGREEMENT STATE REGULATORY REVIEW: INSPECTOR FIELDWORK EVALUATION

Date:_____

Inspector:_____ Reviewer:_____

Licensee:_____ License No.:_____

Location:_____ License Type:_____

Inspection Type:_____ [ ] Announced [ ] Unannounced

A. PRELIMINARY DISCUSSION WITH INSPECTOR

1) Explain the extent of the reviewer's participation in the inspection. . . . . [ ]
2) Discuss the procedure for introducing the reviewer to the licensee and explaining his presence during the inspection. . . . . [ ]
3) Explain the method that will be used for evaluating the inspector's performance. . . . . [ ]

B. SUMMARY OF EVALUATION

1) Inspector's performance rating: [ ] Above Average
   [ ] Meets the Guidelines
   [ ] Needs Improvement
2) Comments:_____
   _____
3) The inspector would benefit from additional training in:_____
   _____
4) The evaluation was discussed with _____. Date:_____
   (Supervisor)

C. INSPECTOR'S PREPARATION

1) Has the inspector reviewed the license and prior compliance history? . . . . Yes No N/A
2) Has the inspector planned the best inspection? . . . . . Yes No N/A
3) Does the inspector have the appropriate instruments? . . . . . Yes No N/A
4) Are the instruments in calibration? . . . . . Yes No N/A
5) Was an instrument response check performed prior to departure? . . . . . Yes No N/A
6) Does the inspector have the necessary supplemental materials: regulations, inspection forms, personal dosimetry, ID, wipe materials, etc. . . . . Yes No N/A

D. OPENING

1) Was opening interview conducted with management? . . . . . Yes No N/A
2) Were previous items of noncompliance discussed? . . . . . Yes No N/A
3) Were incidents or overexposures discussed? . . . . . Yes No N/A
4) Did licensee understand purpose, scope and techniques of the inspection? . . Yes No N/A

E. INSPECTION

1) Did the inspector use appropriate form or checklist? . . . . . Yes No N/A
2) Did inspector perform "walk through" at beginning of inspection? . . . . . Yes No N/A
3) Were licensee operations, and use and handling of material observed? . . . . Yes No N/A

4) Were the facilities checked for proper posting? . . . . . Yes No N/A
5) Was security verified? . . . . . Yes No N/A
6) Were workers checked for personal dosimetry? . . . . . Yes No N/A
7) Were workers interviewed to verify understanding of safety procedures? . . . Yes No N/A
8) Were ancillary workers also interviewed? . . . . . Yes No N/A
9) Were adequate wipes, surveys, and measurements taken? . . . . . Yes No N/A
10) Did inspection check for adherence to ALARA? . . . . . Yes No N/A
11) Were records verified against oral statements for the following:

a. procurement and inventory?	Y	N	N/A	i. dose calibrator tests?	Y	N	N/A
b. receipt/transfer of material?	Y	N	N/A	j. surveys and monitoring? . . .	Y	N	N/A
c. internal audits?	Y	N	N/A	k. personnal dosimetry, bioassay? .	Y	N	N/A
d. user training/qualification? .	Y	N	N/A	l. leak tests?	Y	N	N/A
e. emergency plan/procedures?	Y	N	N/A	m. generator assay/moly bkth/logs?	Y	N	N/A
f. committee meetings? . . .	Y	N	N/A	n. release of effluents - sewer/air? .	Y	N	N/A
g. authorized users?	Y	N	N/A	o. waste management, disposal? .	Y	N	N/A
h. instrument calibration? . .	Y	N	N/A	p. QA and QC?	Y	N	N/A

12) Did inspector monitor and wash hands after handling radioactive material? . . Yes No N/A
13) Did the inspector address all necessary elements of licensee's program? . . . Yes No N/A
If not, explain:_____
14) Were hazards or potential problems discovered and followed up? . . . . . Yes No N/A
If not, explain:_____

CLOSING

1) Was there careful assembly of supporting information prior to exit interview? . Yes No N/A
2) Did inspector make every effort to close with suitable level of management? . Yes No N/A
3) Were recommendations clearly distinguished from items of noncompliance? . Yes No N/A
4) Were items of noncompliance fully explained with corresponding regulation or license condition cited? . . . . . Yes No N/A
5) Did the inspector explain what follow-up actions would occur? . . . . . Yes No N/A
6) Was the licensee advised of any requirements on his part? . . . . . Yes No N/A

PROFESSIONALISM

1) Did the inspector use proper judgment in evaluating radiation safety? . . . . Yes No N/A
2) Did the inspector demonstrate an adequate knowledge of health physics? . . Yes No N/A
3) Did the inspector demonstrate an adequate knowledge of regulations? . . . Yes No N/A
4) Was the inspector's appearance appropriate for the type of licensee? . . . . Yes No N/A
5) Was rapport with licensee management and workers sufficient for free exchange of information? . . . . . Yes No N/A
6) Were the inspector's questions phrased appropriately? . . . . . Yes No N/A

Appendix B

AGREEMENT STATE TRAINING QUALIFICATION FORM

Employee Name_____ Date of Hire_____

Training Areas	Date Completed	Management Signature	Comments
BASIC TRAINING			
Bachelors Degree			
Program Orientation			
Review of State Regulations			
Review of Regulatory Guides			
Review of IMC 2800			
Inspection Procedures - NRC			
Licensing Procedures - NRC			
Transportation - NRC			
Intro. Health Physics - NRC			
Basics of Health Physics - NRC			
SPECIALIZED TRAINING			
Nuclear Medicine - NRC			
Medical Therapy - NRC			
Industrial Radiography - NRC			
Irradiators Technology - NRC			
Env. Monitoring - NRC			
Security Principles - NRC			
Well Logging - NRC			
ADVANCED TRAINING			
Health Physics Tech. - NRC			
Root Cause Workshop - NRC			
Sealed Source & Device - NRC			

Activity #:	Activity Type:	Training Activity Title:	Discipline:	Category:	Facility ID# or Name:	Qualified Staff Signature:	Date Achieved:	RMD Manager Signature:	Date Validated:
		Individual Study Activities							
1.00	ISA	Program Mission: Protecting Public and Occupational Workers from Radiological Hazards	ALL	ALL	-----N/A-----				
2.00	ISA	Brief History and Organization of the U.S. NRC and NC Agreement State Program / Section 274 of Atomic Energy Act of 1954	ALL	ALL	-----N/A-----				
3.00	ISA	Short Intro and Overview to 10 A NCAC 15 and 10 CFR	ALL	ALL	-----N/A-----				
4.00	ISA	Regulatory Ethics & Expectations of State Employees	ALL	ALL	-----N/A-----				
5.00	ISA	Public Communication Expectations (Conduct, FOIA Requests, Media Interest, etc)	ALL	ALL	-----N/A-----				
6.00	ISA	Overview of Safety Culture Policies and Initiatives	ALL	ALL	-----N/A-----				
7.00	ISA	Review of Available Equipment and Resources Utilized by Health Physicists	ALL	ALL	-----N/A-----				
8.00	ISA	Proper Surveying Techniques and Applications	ALL	ALL	-----N/A-----				
9.00	ISA	Overview of Various RAM Applications and Devices (Industrial, Medical, Academic, etc)	ALL	ALL	-----N/A-----				
10.00	ISA	Overview of Electronic Filing Folders, Web Based Licensing (WBL), and Attain Access	ALL	ALL	-----N/A-----				
11.00	ISA	Introduction to Security / Part 37 Requirments and Program Implementation	ALL	ALL	-----N/A-----				
12.00	ISA	Learn about National Source Tracking System (NSTS) and Attain Access	INSPECTION, SECURITY	ALL	-----N/A-----				
13.00	ISA	Document Control Policy Review (Secured or Proprietary)	ALL	ALL	-----N/A-----				
14.00	ISA	Reciprocity License Issuance and Inspection	INSPECTION, LICENSING	ALL	-----N/A-----				
15.00	ISA	WBL for Licensing - Process Overiew	LICENSING	ALL	-----N/A-----				
16.00	ISA	Licensing Procedure Review	LICENSING	ALL	-----N/A-----				
17.00	ISA	Licensing Reference Review (NUREG-1556s, NC Guides, Forms, etc)	LICENSING	ALL	-----N/A-----				
18.00	ISA	Licensing Reviews for Financial Assurance	LICENSING	ALL	-----N/A-----				
19.00	ISA	Review of GAO Sting and Pre-Licensing Requirements	LICENSING, SECURITY	ALL	-----N/A-----				
20.00	ISA	Licensing Reviews for Increased Controls and Part 37 Requirements	LICENSING, SECURITY	ALL	-----N/A-----				
21.00	ISA	Decommissioning versus Standard Termination	DECOMMISSION, LICENSING	ALL	-----N/A-----				
22.00	ISA	Sealed Source and Device Registry (SS&D) - Process Overview and Attain Access	INSPECTION, LICENSING, SS&D	ALL	-----N/A-----				
23.00	ISA	NC SS&D Evaluation Procedure Review	SS&D	M&D	-----N/A-----				
24.00	ISA	WBL for Inspection - Process Overiew	INSPECTION	ALL	-----N/A-----				
25.00	ISA	Inspection Procedure Review	INSPECTION	ALL	-----N/A-----				
26.00	ISA	Inspection Reference Review (IMC 2800, IP 8XXXX Series, NC Guides, Forms, etc)	INSPECTION	ALL	-----N/A-----				
27.00	ISA	Security Inspection Overview	INSPECTION, SECURITY	ALL	-----N/A-----				
28.00	ISA	Enforcement Process and Procedural Overview	INSPECTION	ALL	-----N/A-----				
29.00	ISA	Nuclear Materials Events Database (NMED) - Process Overview and Attain Access	ALL	ALL	-----N/A-----				
30.00	ISA	Review Significant NMED Entries and Abnormal Occurrences	ALL	ALL	-----N/A-----				
31.00	ISA	Incident and Allegation Procedure Review	RESPONSE	ALL	-----N/A-----				
32.00	ISA	Processing DOT/CRCPD Exemptions	RESPONSE	ALL	-----N/A-----				
33.00	ISA	Familiarize with Power Plant Emergency Response Procedures and Possible Roles	RESPONSE	ALL	-----N/A-----				
34.00	ISA	U.S. NRC and NC Radiation Control Act (NC GS 104E) - Thorough Study and Review	ALL	ALL	-----N/A-----				
35.00	ISA	Regulations on Licensing of RAM - Thorough Study and Review	LICENSING	ALL	-----N/A-----				
36.00	ISA	Regulations on Medical Use of RAM - Thorough Study and Review	INSPECTION, LICENSING	MEDICAL	-----N/A-----				
37.00	ISA	Regulations on Transportation of RAM - Thorough Study and Review	INSPECTION, LICENSING	ALL	-----N/A-----				
38.00	ISA	Regulations on Increased Security of RAM - Thorough Study and Review	INSPECTION, LICENSING, SECURITY	ALL	-----N/A-----				
39.00	ISA	Regulations on General License and Exempt RAM - Thorough Study and Review	INSPECTION, LICENSING	GENERAL LICENSE	-----N/A-----				
40.00	ISA	Regulations on Radiography - Thorough Study and Review	INSPECTION, LICENSING, SECURITY	RADIOGRAPHY	-----N/A-----				
41.00	ISA	Regulations on Irradiators - Thorough Study and Review	INSPECTION, LICENSING, SECURITY	IRRADIATORS	-----N/A-----				
42.00	ISA	Regulations on Standards for Protection - Thorough Study and Review	ALL	ALL	-----N/A-----				
43.00	ISA	Regulations on Reporting Requirements - Thorough Study and Review	ALL	ALL	-----N/A-----				
		Formal Training Classes							
44.00	FT	H-122 Fundamental Health Physics (Blended Learing)	ALL	ALL	-----N/A-----				
45.00	FT	H-201 Advanced Health Physics	ALL	ALL	-----N/A-----				
46.00	FT	General OSHA Safety Training	ALL	ALL	-----N/A-----				
47.00	FT	G-108 Inspection Procedures	INSPECTION	ALL	-----N/A-----				
48.00	FT	G-109 Licensing Practices and Procedures	LICENSING	ALL	-----N/A-----				
49.00	FT	H-308 Transportation of Radioactive Materials	INSPECTION, LICENSING	ALL	-----N/A-----				
50.00	FT	H-304 Diagnostic and Therapeutic Nuclear Medicine	INSPECTION, LICENSING	MEDICAL	-----N/A-----				
51.00	FT	H-313 Brachytherapy, Gamma Knife and Emerging Technologies	INSPECTION, LICENSING	MEDICAL THERAPY	-----N/A-----				
52.00	FT	H-305 Safety Aspects of Industrial Radiography	INSPECTION, LICENSING	RADIOGRAPHY	-----N/A-----				
54.00	FT	H-315 Irradiator Technology Course	INSPECTION, LICENSING	IRRADIATORS	-----N/A-----				
55.00	FT	S-201 NRC Materials Control & Security Systems & Principles	INSPECTION, LICENSING, SECURITY	ALL	-----N/A-----				
56.00	FT	Sealed Source and Device Workshop	SS&D	M&D	-----N/A-----				
57.00	FT	G-205 Root Cause/Incident Workshop	INSPECTION, RESPONSE, SS&D	ALL	-----N/A-----				

58.00	FT	Radiological Emergency Response Operations (RERO)	RESPONSE	ALL	-----N/A-----				
59.00	FT	H-312 Internal Dosimetry and Whole Body Counting	RESPONSE	ALL	-----N/A-----				
60.00	FT	H-111 Environmental Monitoring for Radioactivity	ENIRONMENTAL, DECOMMISSION	ALL	-----N/A-----				
61.00	FT	H-115 Characterization and Planning for Decommissioning	DECOMMISSION	ALL	-----N/A-----				
62.00	FT	H-121 MARSSIM Site Investigation	DECOMMISSION	ALL	-----N/A-----				
63.00	FT	H-120 MARSAME Assessment of Materials and Equipment	DECOMMISSION	ALL	-----N/A-----				
64.00	FT	H-410 RESRAD Training Workshop	DECOMMISSION	ALL	-----N/A-----				
65.00	FT	H-500 Visual Sampling	ENIRONMENTAL, DECOMMISSION	ALL	-----N/A-----				
		Routine On the Job Training							
66.00	OJT	General Licensed Devices	INSPECTION, LICENSING	GENERAL LICENSE	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----
66.01	OJT	License Amendment - Mentored	INSPECTION, LICENSING	GENERAL LICENSE					
66.02	OJT	Extra License Action - If Needed:	LICENSING	GENERAL LICENSE					
66.03	OJT	Inspection - Participate	INSPECTION, LICENSING	GENERAL LICENSE					
66.04	OJT	Extra Inspection - If Needed:	INSPECTION	GENERAL LICENSE					
66.05	OJT	**Interim Qualification - Inspection**	INSPECTION	GENERAL LICENSE					
66.06	OJT	**Interim Qualification - Licensing**	LICENSING	GENERAL LICENSE					
67.00	OJT	Fixed Nuclear Guage	INSPECTION, LICENSING	GAUGES FIXED	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----
67.01	OJT	License Amendment - Mentored	INSPECTION, LICENSING	GAUGES FIXED					
67.02	OJT	License Amendment - Mentored	LICENSING	GAUGES FIXED					
67.03	OJT	License Renewal - Mentored	LICENSING	GAUGES FIXED					
67.04	OJT	Extra License Action - If Needed:	LICENSING	GAUGES FIXED					
67.05	OJT	Inspection - Participate	INSPECTION, LICENSING	GAUGES FIXED					
67.06	OJT	Inspection - Participate	INSPECTION	GAUGES FIXED					
67.07	OJT	Inspection - Lead	INSPECTION	GAUGES FIXED					
67.08	OJT	Extra Inspection - If Needed:	INSPECTION	GAUGES FIXED					
67.09	OJT	**Interim Qualification - Inspection**	INSPECTION	GAUGES FIXED					
67.10	OJT	**Interim Qualification - Licensing**	LICENSING	GAUGES FIXED					
68.00	OJT	Portable Nuclear Gauge	INSPECTION, LICENSING	GAUGES PORTABLE	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----
68.01	OJT	License Amendment - Mentored	INSPECTION, LICENSING	GAUGES PORTABLE					
68.02	OJT	License Amendment - Mentored	LICENSING	GAUGES PORTABLE					
68.03	OJT	License Renewal - Mentored	LICENSING	GAUGES PORTABLE					
68.04	OJT	Extra License Action - If Needed:	LICENSING	GAUGES PORTABLE					
68.05	OJT	Inspection - Participate	INSPECTION, LICENSING	GAUGES PORTABLE					
68.06	OJT	Inspection - Participate	INSPECTION	GAUGES PORTABLE					
68.07	OJT	Inspection - Lead	INSPECTION	GAUGES PORTABLE					
68.08	OJT	Extra Inspection - If Needed:	INSPECTION	GAUGES PORTABLE					
68.09	OJT	**Interim Qualification - Inspection**	INSPECTION	GAUGES PORTABLE					
68.10	OJT	**Interim Qualification - Licensing**	LICENSING	GAUGES PORTABLE					
69.00	OJT	Nuclear Medicine-Non WD Required	INSPECTION, LICENSING	MEDICAL DIAGNOSTIC	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----
69.01	OJT	License Amendment - Mentored	INSPECTION, LICENSING	MEDICAL DIAGNOSTIC					
69.02	OJT	License Amendment - Mentored	LICENSING	MEDICAL DIAGNOSTIC					
69.03	OJT	License Renewal - Mentored	LICENSING	MEDICAL DIAGNOSTIC					
69.04	OJT	Extra License Action - If Needed:	LICENSING	MEDICAL DIAGNOSTIC					
69.05	OJT	Inspection - Participate	INSPECTION, LICENSING	MEDICAL DIAGNOSTIC					
69.06	OJT	Inspection - Participate	INSPECTION	MEDICAL DIAGNOSTIC					
69.07	OJT	Inspection - Lead	INSPECTION	MEDICAL DIAGNOSTIC					
69.08	OJT	Extra Inspection - If Needed:	INSPECTION	MEDICAL DIAGNOSTIC					
69.09	OJT	**Interim Qualification - Inspection**	INSPECTION	MEDICAL DIAGNOSTIC					
69.10	OJT	**Interim Qualification - Licensing**	LICENSING	MEDICAL DIAGNOSTIC					
70.00	OJT	Nuclear Medicine-WD Required	INSPECTION, LICENSING	MEDICAL THERAPY	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----
70.01	OJT	License Amendment - Mentored	INSPECTION, LICENSING	MEDICAL THERAPY					
70.02	OJT	License Amendment - Mentored	LICENSING	MEDICAL THERAPY					
70.03	OJT	License Renewal - Mentored	LICENSING	MEDICAL THERAPY					
70.04	OJT	Extra License Action - If Needed:	LICENSING	MEDICAL THERAPY					
70.05	OJT	Inspection - Participate	INSPECTION, LICENSING	MEDICAL THERAPY					
70.06	OJT	Inspection - Participate	INSPECTION	MEDICAL THERAPY					
70.07	OJT	Inspection - Lead	INSPECTION	MEDICAL THERAPY					

70.08	OJT	Extra Inspection - If Needed:	INSPECTION	MEDICAL THERAPY					
70.09	OJT	**Interim Qualification - Inspection**	INSPECTION	MEDICAL THERAPY					
70.10	OJT	**Interim Qualification - Licensing**	LICENSING	MEDICAL THERAPY					
71.00	OJT	Medical Accelerators	INSPECTION, LICENSING	MEDICAL THERAPY	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----
71.01	OJT	License Amendment - Mentored	INSPECTION, LICENSING	MEDICAL THERAPY					
71.02	OJT	License Amendment - Mentored	LICENSING	MEDICAL THERAPY					
71.03	OJT	License Renewal - Mentored	LICENSING	MEDICAL THERAPY					
71.04	OJT	Extra License Action - If Needed:	LICENSING	MEDICAL THERAPY					
71.05	OJT	Inspection - Participate	INSPECTION, LICENSING	MEDICAL THERAPY					
71.06	OJT	Inspection - Participate	INSPECTION	MEDICAL THERAPY					
71.07	OJT	Inspection - Lead	INSPECTION	MEDICAL THERAPY					
71.08	OJT	Extra Inspection - If Needed:	INSPECTION	MEDICAL THERAPY					
71.09	OJT	**Interim Qualification - Inspection**	INSPECTION	MEDICAL THERAPY					
71.10	OJT	**Interim Qualification - Licensing**	LICENSING	MEDICAL THERAPY					
72.00	OJT	Teletherapy/HDR Brachytherapy	INSPECTION, LICENSING	MEDICAL THERAPY	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----
72.01	OJT	License Amendment - Mentored	INSPECTION, LICENSING	MEDICAL THERAPY					
72.02	OJT	License Amendment - Mentored	LICENSING	MEDICAL THERAPY					
72.03	OJT	License Renewal - Mentored	LICENSING	MEDICAL THERAPY					
72.04	OJT	Extra License Action - If Needed:	LICENSING	MEDICAL THERAPY					
72.05	OJT	Inspection - Participate	INSPECTION, LICENSING	MEDICAL THERAPY					
72.06	OJT	Inspection - Participate	INSPECTION	MEDICAL THERAPY					
72.07	OJT	Inspection - Lead	INSPECTION	MEDICAL THERAPY					
72.08	OJT	Extra Inspection - If Needed:	INSPECTION	MEDICAL THERAPY					
72.09	OJT	**Interim Qualification - Inspection**	INSPECTION	MEDICAL THERAPY					
72.10	OJT	**Interim Qualification - Licensing**	LICENSING	MEDICAL THERAPY					
73.00	OJT	Permanent Implant Brachytherapy	INSPECTION, LICENSING	MEDICAL THERAPY	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----
73.01	OJT	License Amendment - Mentored	INSPECTION, LICENSING	MEDICAL THERAPY					
73.02	OJT	License Amendment - Mentored	LICENSING	MEDICAL THERAPY					
73.03	OJT	License Renewal - Mentored	LICENSING	MEDICAL THERAPY					
73.04	OJT	Extra License Action - If Needed:	LICENSING	MEDICAL THERAPY					
73.05	OJT	Inspection - Participate	INSPECTION, LICENSING	MEDICAL THERAPY					
73.06	OJT	Inspection - Participate	INSPECTION	MEDICAL THERAPY					
73.07	OJT	Inspection - Lead	INSPECTION	MEDICAL THERAPY					
73.08	OJT	Extra Inspection - If Needed:	INSPECTION	MEDICAL THERAPY					
73.09	OJT	**Interim Qualification - Inspection**	INSPECTION	MEDICAL THERAPY					
73.10	OJT	**Interim Qualification - Licensing**	LICENSING	MEDICAL THERAPY					
74.00	OJT	Broad Scope - Medical	INSPECTION, LICENSING	BROAD, MEDICAL	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----
74.01	OJT	License Amendment - Mentored	INSPECTION, LICENSING	BROAD, MEDICAL					
74.02	OJT	License Amendment - Mentored	LICENSING	BROAD, MEDICAL					
74.03	OJT	License Renewal - Mentored	LICENSING	BROAD, MEDICAL					
74.04	OJT	Extra License Action - If Needed:	LICENSING	BROAD, MEDICAL					
74.05	OJT	Inspection - Participate	INSPECTION, LICENSING	BROAD, MEDICAL					
74.06	OJT	Inspection - Participate	INSPECTION	BROAD, MEDICAL					
74.07	OJT	Inspection - Lead	INSPECTION	BROAD, MEDICAL					
74.08	OJT	Extra Inspection - If Needed:	INSPECTION	BROAD, MEDICAL					
74.09	OJT	**Interim Qualification - Inspection**	INSPECTION	BROAD, MEDICAL					
74.10	OJT	**Interim Qualification - Licensing**	LICENSING	BROAD, MEDICAL					
75.00	OJT	Broad Scope - Academic or R&D	INSPECTION, LICENSING	BROAD	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----
75.01	OJT	License Amendment - Mentored	INSPECTION, LICENSING	BROAD					
75.02	OJT	License Amendment - Mentored	LICENSING	BROAD					
75.03	OJT	License Renewal - Mentored	LICENSING	BROAD					
75.04	OJT	Extra License Action - If Needed:	LICENSING	BROAD					
75.05	OJT	Inspection - Participate	INSPECTION, LICENSING	BROAD					
75.06	OJT	Inspection - Participate	INSPECTION	BROAD					

75.07	OJT	Inspection - Lead	INSPECTION	BROAD					
75.08	OJT	Extra Inspection - If Needed:	INSPECTION	BROAD					
75.09	OJT	**Interim Qualification - Inspection**	INSPECTION	BROAD					
75.10	OJT	**Interim Qualification - Licensing**	LICENSING	BROAD					
76.00	OJT	Irradiator (Self shielded)	INSPECTION, LICENSING, SECURITY	IRRADIATORS SELF	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----
76.01	OJT	License Amendment - Mentored	INSPECTION, LICENSING, SECURITY	IRRADIATORS SELF					
76.02	OJT	License Amendment - Mentored	LICENSING	IRRADIATORS SELF					
76.03	OJT	License Renewal - Mentored	LICENSING	IRRADIATORS SELF					
76.04	OJT	Extra License Action - If Needed:	LICENSING	IRRADIATORS SELF					
76.05	OJT	Inspection - Participate	INSPECTION, LICENSING, SECURITY	IRRADIATORS SELF					
76.06	OJT	Inspection - Participate	INSPECTION	IRRADIATORS SELF					
76.07	OJT	Inspection - Lead	INSPECTION	IRRADIATORS SELF					
76.08	OJT	Extra Inspection - If Needed:	INSPECTION	IRRADIATORS SELF					
76.09	OJT	**Interim Qualification - Inspection**	INSPECTION	IRRADIATORS SELF					
76.10	OJT	**Interim Qualification - Licensing**	LICENSING	IRRADIATORS SELF					
77.00	OJT	Irradiator (Pool shielded)	INSPECTION, LICENSING, SECURITY	IRRADIATORS POOL	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----
77.01	OJT	License Amendment - Mentored	INSPECTION, LICENSING, SECURITY	IRRADIATORS POOL					
77.02	OJT	License Amendment - Mentored	LICENSING	IRRADIATORS POOL					
77.03	OJT	License Renewal - Mentored	LICENSING	IRRADIATORS POOL					
77.04	OJT	Extra License Action - If Needed:	LICENSING	IRRADIATORS POOL					
77.05	OJT	Inspection - Participate	INSPECTION, LICENSING, SECURITY	IRRADIATORS POOL					
77.06	OJT	Inspection - Participate	INSPECTION	IRRADIATORS POOL					
77.07	OJT	Inspection - Lead	INSPECTION	IRRADIATORS POOL					
77.08	OJT	Extra Inspection - If Needed:	INSPECTION	IRRADIATORS POOL					
77.09	OJT	**Interim Qualification - Inspection**	INSPECTION	IRRADIATORS POOL					
77.10	OJT	**Interim Qualification - Licensing**	LICENSING	IRRADIATORS POOL					
78.00	OJT	Industrial Radiography	INSPECTION, LICENSING, SECURITY	RADIOGRAPHY	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----
78.01	OJT	License Amendment - Mentored	INSPECTION, LICENSING, SECURITY	RADIOGRAPHY					
78.02	OJT	License Amendment - Mentored	LICENSING	RADIOGRAPHY					
78.03	OJT	License Renewal - Mentored	LICENSING	RADIOGRAPHY					
78.04	OJT	Extra License Action - If Needed:	LICENSING	RADIOGRAPHY					
78.05	OJT	Inspection - Participate	INSPECTION, LICENSING, SECURITY	RADIOGRAPHY					
78.06	OJT	Inspection - Participate	INSPECTION	RADIOGRAPHY					
78.07	OJT	Inspection - Lead	INSPECTION	RADIOGRAPHY					
78.08	OJT	Extra Inspection - If Needed:	INSPECTION	RADIOGRAPHY					
78.09	OJT	**Interim Qualification - Inspection**	INSPECTION	RADIOGRAPHY					
78.10	OJT	**Interim Qualification - Licensing**	LICENSING	RADIOGRAPHY					
79.00	OJT	TENORM Facility	INSPECTION, LICENSING	TENORM	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----
79.01	OJT	License Amendment - Mentored	INSPECTION, LICENSING	TENORM					
79.02	OJT	License Amendment - Mentored	LICENSING	TENORM					
79.03	OJT	License Renewal - Mentored	LICENSING	TENORM					
79.04	OJT	Extra License Action - If Needed:	LICENSING	TENORM					
79.05	OJT	Inspection - Participate	INSPECTION, LICENSING	TENORM					
79.06	OJT	Inspection - Participate	INSPECTION	TENORM					
79.07	OJT	Inspection - Lead	INSPECTION	TENORM					
79.08	OJT	Extra Inspection - If Needed:	INSPECTION	TENORM					
79.09	OJT	**Interim Qualification - Inspection**	INSPECTION	TENORM					
79.10	OJT	**Interim Qualification - Licensing**	LICENSING	TENORM					
80.00	OJT	Nuclear Pharmacy (Cyclotrons Included)	INSPECTION, LICENSING	M&D, PHARMACY	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----
80.01	OJT	License Amendment - Mentored	INSPECTION, LICENSING	M&D, PHARMACY					
80.02	OJT	License Amendment - Mentored	LICENSING	M&D, PHARMACY					
80.03	OJT	License Renewal - Mentored	LICENSING	M&D, PHARMACY					
80.04	OJT	Extra License Action - If Needed:	LICENSING	M&D, PHARMACY					
80.05	OJT	Inspection - Participate	INSPECTION, LICENSING	M&D, PHARMACY					
80.06	OJT	Inspection - Participate	INSPECTION	M&D, PHARMACY					
80.07	OJT	Inspection - Lead	INSPECTION	M&D, PHARMACY					
80.08	OJT	Extra Inspection - If Needed:	INSPECTION	M&D, PHARMACY					
80.09	OJT	**Interim Qualification - Inspection**	INSPECTION	M&D, PHARMACY					
80.10	OJT	**Interim Qualification - Licensing**	LICENSING	M&D, PHARMACY					
81.00	OJT	Manufacturer & Distributor	INSPECTION, LICENSING	M&D	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----
81.01	OJT	License Amendment - Mentored	INSPECTION, LICENSING	M&D					
81.02	OJT	License Amendment - Mentored	LICENSING	M&D					

81.03	OJT	License Renewal - Mentored	LICENSING	M&D					
81.04	OJT	Extra License Action - If Needed:	LICENSING	M&D					
81.05	OJT	Inspection - Participate	INSPECTION, LICENSING	M&D					
81.06	OJT	Inspection - Participate	INSPECTION	M&D					
81.07	OJT	Inspection - Lead	INSPECTION	M&D					
81.08	OJT	Extra Inspection - If Needed:	INSPECTION	M&D					
81.09	OJT	**Interim Qualification - Inspection**	INSPECTION	M&D					
81.10	OJT	**Interim Qualification - Licensing**	LICENSING	M&D					
82.00	OJT	Increased Security - Part 37/IC	INSPECTION, LICENSING, SECURITY	ALL	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----	-----N/A-----
82.01	OJT	Security Inspection - Participate	INSPECTION, LICENSING, SECURITY	ALL					
82.02	OJT	Security Inspection - Participate	SECURITY	ALL					
82.03	OJT	Security Inspection - Lead	SECURITY	ALL					
82.04	OJT	Extra Security Inspection - If Needed:	SECURITY	ALL					
82.05	OJT	**Interim Qualification - Security**	SECURITY	ALL					
		Miscellaneous On the Job Training							
83.01	OJT	Pre-License Visit / License Delivery - Participate	INSPECTION, LICENSING, SECURITY	ALL					
83.02	OJT	Pre-License Visit / License Delivery - Lead	INSPECTION, LICENSING	ALL					
84.01	OJT	Field Applications & Inspections - Participate	INSPECTION	ALL					
84.02	OJT	Field Applications & Inspections - Lead	INSPECTION	ALL					
85.01	OJT	Reciprocity License Application - Mentored	LICENSING	ALL					
85.02	OJT	Reciprocity License Application - Mentored	LICENSING	ALL					
85.03	OJT	**Interim Qualification - Reciprocity License Reviewer**	LICENSING	ALL					
85.04	OJT	Reciprocity Inspection - Participate	INSPECTION	ALL					
85.05	OJT	Reciprocity Inspection - Lead	INSPECTION	ALL					
85.06	OJT	**Interim Qualification - Reciprocity Inspector**	INSPECTION	ALL					
86.00	OJT	Termination (Any Non-Decommissioning) - Mentored	LICENSING	ALL					
87.01	OJT	Any Full Scale Decommissioning - Participate	DECOMMISSION	ALL					
87.02	OJT	Any Full Scale Decommissioning - Lead	DECOMMISSION	ALL					
87.03	OJT	**Interim Qualification - Decommissioning**	DECOMMISSION	ALL					
88.01	OJT	Reactive Investigation - Medical Incident - Participate	RESPONSE	MEDICAL					
88.02	OJT	Reactive Investigation - Non-Medical Incident - Participate	RESPONSE	ALL					
88.03	OJT	Reactive Investigation - Scrapyard/Landfill - Participate	RESPONSE	ALL					
88.04	OJT	Reactive Investigation - Allegation - Participate	RESPONSE	ALL					
88.05	OJT	**Interim Qualification - Response**	RESPONSE	ALL					
89.01	OJT	SS&D Evaluation - Mentored	SS&D	M&D					
89.02	OJT	SS&D Evaluation - Mentored	SS&D	M&D					
89.03	OJT	SS&D Evaluation - Lead	SS&D	M&D					
89.04	OJT	**Interim Qualification - SS&D Reviewer**	SS&D	M&D					
		Overall Qualification							
90.00	BOARD	**Oral Board Passed (After 80% Interim Achieved)**	ALL	ALL	-----N/A-----	Evaluator Names: 1: 2: 3:			
		Continuing Training							
91.00									
92.00									
93.00									
94.00									
95.00									
96.00									
97.00									
98.00									
99.00									
100.00									

NRC INSPECTION MANUAL

FSME

MANUAL CHAPTER 1248

QUALIFICATION PROGRAMS FOR FEDERAL AND STATE MATERIALS AND ENVIRONMENTAL MANAGEMENT PROGRAMS

Contents

1248-01 PURPOSE

01.01 To define training and qualification requirements for staff under the Federal and State Materials and Environmental Management Programs (FSME) program areas.

01.02 To establish the requirements for maintaining qualification.

1248-02 OBJECTIVES

02.01 To ensure that staff under the FSME program areas meet minimum knowledge and qualification standards.

02.02 To provide standardized methodology for determining that staff under the FSME program area have met the minimum knowledge and qualification requirements.

1248-03 DEFINITIONS

03.01 Inspector, License Reviewer, Project Manager, or Technical Reviewer Qualification. The certification by the office director, regional administrator, or designee, the basis of which is a recommendation by the qualification board and/or division management. Inspector, license reviewer, project manager, and technical reviewer are general titles indicating that an individual has completed one of the "Qualification Journals" in the appendices to this Manual Chapter. As determined by division management, the qualification may have a more specific title, such as Materials License Reviewer, Decommissioning Inspector, Uranium Recovery Project Manager or Exempt Distribution License Reviewer. Completing a qualification allows staff members to be assigned the full scope of FSME program area activities in their specific discipline. The assigned tasks are performed independently with routine oversight and supervision.

03.02 Candidate. A staff member who is working to complete one or more of the qualification journals in this Manual Chapter.

03.03 Category. An area or class of activity for which a license may be issued, such as uranium recovery, reactors, materials, and decommissioning.

03.04 Discipline. A specific qualification being sought by a candidate, such as Materials License Reviewer, Decommissioning Inspector and Uranium Recovery Inspector.

03.05 Specialized Training Courses. Additional training courses beyond those required. The candidate's immediate supervisor determines additional training requirements depending on the candidate's previous work experience and planned work activities.

03.06 Individual Study Activity (ISA). A training method candidates use to perform a self-study of certain topics in a specific discipline.

03.07 On-the-job Training (OJT). A training method using structured hands-on activities to develop the required job-related knowledge and skills.

03.08 Refresher Training. Additional training required after qualification that allows a staff member to maintain a “qualified” status.

03.09 Qualification Journal. The document used by a candidate to record completion of the minimum training requirements for qualification in a discipline. The qualification journals are found in the appendices to this Manual Chapter.

03.10 Qualification Board. A board established to assess the qualifications of a candidate to conduct the prescribed FSME program area activities.

03.11 Qualified Staff. A staff member who has successfully completed a qualification journal from this Manual Chapter (or the predecessor Manual Chapter 1246) and who has been certified by the regional administrator, office director, or designee.

1248-04 RESPONSIBILITIES AND AUTHORITIES

04.01 Chief Learning Officer (CLO) for Human Resources Training and Development, Office of Human Resources (or Designee). Administers and implements the training programs for the FSME program areas. Provides the Human Resources Training and Development (HRTD) training courses described in the qualification journals found in the appendices to this Manual Chapter.

04.02 Director, Office of Federal and State Materials and Environmental Management Programs (or Designee). Establishes the training requirements needed for staff under the FSME program areas to perform independent FSME program area activities. Ensures that appropriate headquarters candidates achieve qualification and qualified staff members maintain qualification in accordance with the guidelines provided in this Manual Chapter. Develops and implements qualification procedures for staff under the FSME program areas. Certifies that appropriate FSME staff is qualified under this Manual Chapter.

04.03 Regional Administrator (or Designee). Ensures that appropriate regional candidates achieve qualification and qualified staff members maintain qualification in accordance with the guidelines provided in this Manual Chapter. Develops and implements qualification procedures for regional staff as needed. Certifies that appropriate regional staff is qualified under this Manual Chapter.

04.04 Division Directors, FSME and Regional Divisions (or Designee). Assist the appropriate HRTD staff in developing, monitoring, and reviewing classroom training for the FSME qualification program. Identify and document in a candidate’s qualification journal specialized training courses necessary to supplement required training.

04.05 Immediate Supervisor. Ensure that candidates under their supervision complete required training and OJT. Determine if additional training or OJT is needed to adequately qualify the candidate. Ensures the candidate is prepared for evaluation by a qualification board. Assembles Qualification Board and arranges a date to hold the Qualification Board.

1248-05 BASIC REQUIREMENTS

Staff under the FSME program areas must understand the facilities, equipment, processes, and activities of the programs and/or projects they inspect, license, or manage, as well as the criteria, techniques, and mechanics of the specific discipline for which they are responsible.

The qualification process provides candidates in all disciplines with sufficient information on appropriate technologies to allow candidates to carry out their responsibilities in accordance with the U.S. Nuclear Regulatory Commission (NRC) regulations, policies, and procedures.

Candidates assigned to positions that require specific discipline qualifications must successfully complete the appropriate qualification journal(s) found in the appendices to this Manual Chapter. In addition to the requirements of this Manual Chapter, other training may be necessary to supplement or enhance the development of the candidate, as determined by the candidate's immediate supervisor.

The qualification journal(s) in the appendices to this Manual Chapter specify the minimum qualification requirements for the specific disciplines in the FSME program areas. The immediate supervisor and/or division management may customize specific qualification journals to add other requirements, as appropriate. Before customizing a specific qualification journal, the candidate's immediate supervisor must consider whether the change is needed for the candidate to perform her or his assigned function. Any customization must be documented to include the reason for the change. Division management will resolve any disagreement resulting from the customization of a qualification journal.

Upon completion of the training identified in the qualification journal, the qualification board evaluates the candidate's understanding of the material. All qualification boards will be convened using the guidance in Section 1248-08.

In situations in which qualification is delayed as a result of the unavailability of required classroom training, or for other compelling reasons, the regional administrator, office director, or designee may provide the candidate written interim qualification under the provisions of Section 1248-09 for those categories in which the candidate is considered qualified. A candidate that changes disciplines must meet or complete the requirements for the new discipline. In such cases, the candidate need not repeat previous equivalent training requirements in common between the two disciplines. The new qualification journals shall indicate credit for similar training taken previously.

Special circumstances (e.g., budget reductions, delays in establishing replacement contracts, unavailability of critical instructors) may result in the temporary unavailability of courses required for qualification. In this case, the appropriate HRTD staff will communicate with the cognizant FSME or regional division managers explaining the situation. This does not remove the candidate's requirement to attend the course(s). The candidate's schedule will be adjusted, as appropriate, to allow and require the candidate to attend the required training when available.

NRC Temporary Instructions (TIs) or Policies and Procedures (P&Ps) that focus on a specific discipline may require special training before personnel perform specific job functions. The

FSME program division responsible for preparing the TIs or P&Ps shall identify these special training requirements and communicate the training needs to the appropriate HRTD staff, as necessary. The schedule for special training should allow enough time for the FSME division to prepare the required training course and implement it in coordination with HRTD before inspection or licensing is performed using the TIs or P&Ps.

Exemption from specific requirements may be granted in accordance with Section 1248-11 of this Manual Chapter.

1248-06 TRAINING ACTIVITIES

Candidates assigned to the FSME program areas must successfully complete the requirements they have been assigned in the qualification journal.

a. Written examinations for designated courses evaluate the candidate's understanding of the material.

b. Not all courses have examinations. In these cases, satisfactory course completion requires attendance and completion of class activities. For incomplete attendance, satisfactory course completion requires determination on a case-by-case basis in accordance with established HRTD policy.

c. Candidates or qualified staff taking training who fail examinations may be given the opportunity to review the material through self-study and may then be reexamined. If deemed desirable, candidates or qualified staff who do not complete the course, or who fail the course's examination, may repeat the course in accordance with established HRTD policy. The staff member's immediate supervisor and HRTD staff will determine whether the staff member can review the material through self-study and then retake the exam, if there is one associated with the course, or if the staff member must repeat the entire course.

d. HRTD staff will document the completion of classroom training in iLearn.

1248-07 QUALIFICATION JOURNAL COMPLETION

The qualification journals contain a detailed series of activities and study areas. The candidate will complete the activities in the qualification journals within a specific period, usually in the first 2 years after the assignment. If candidates need more time to complete their qualification journal, division management may grant an extension. The justification and approval for the extension must be documented in the candidate's training record.

Immediate supervisors may designate one or more qualified staff members to sign and certify the signature (qualification) cards for the training activities completed by the candidate. If no qualified staff members are available, senior staff members with expertise in a particular area can be utilized. Only a manager can certify completion of a qualification journal.

1248-08 QUALIFICATION BOARD

A candidate must be recommended by a qualification board and certified by a regional administrator, office director, or designee to be qualified. Alternatively, in accordance with Section 1248-11, this recommendation can be made by division management to the regional administrator, office director, or designee. This section describes the use of the qualification board.

The qualification board evaluates how well a candidate can integrate and apply the specific qualification competencies to real-life scenarios. Upon completion of all requirements identified in the candidate's qualification journals, a qualification board will be used to determine if the candidate has the necessary competencies to independently conduct the prescribed FSME program area responsibilities in the candidate's specific discipline. A description of the competencies assessed by the qualification board is contained in the appendices to this Manual Chapter. It is the responsibility of the candidate and the candidate's immediate supervisor that the candidate be ready for the board. The schedule for the board must be agreed to by the candidate, the candidate's immediate supervisor, and the board members.

1. Board Members. A qualification board consists of at least three (3) members and not more than five (5) members. The board should contain a cross-section of knowledgeable staff ranging from a peer with qualification in the discipline being sought by the candidate to a division director. Each board shall contain a member who is at least at the level of the candidate's immediate supervisor. The board chairperson shall be at the level of the candidate's immediate supervisor, as a minimum, but should not be the candidate's immediate supervisor. Any disagreement with the membership of the qualification board will be resolved by division management.

2. Board Conduct.

   (a) The board chairperson assigns topics for questioning to each of the board members to ensure that the questioning will address the training requirements in each of the appendices that require verification by the board. Prior to the qualification board, the board members should coordinate questions or scenarios to ensure the competencies are covered.

   (b) Specific questions can be selected from those used during previous qualification boards or new questions can be written. Management has the flexibility to create and maintain a collection of qualification board questions. Each question must relate to at least one of the competencies to be verified by the board. Questions should be "open-ended" to allow and encourage the candidate to provide answers that demonstrate competency with NRC policy and philosophy, as they relate to the licensee, and to implementation of the FSME program areas.

(c) Technical questions should be limited in number, pertain to the discipline in which qualification is being sought, and should not be the primary focus of the board's assessment. Technically based scenarios and examples can be used to determine how well candidates can translate their technical knowledge into appropriate inspector actions; however, questioning merely to determine if a candidate can recall specific technical facts must be minimized.

(d) The board typically requires about 2 hours to complete its assessment. The time may vary based on the individual board and the candidate.

3. Board Recommendations. Each time the board examines a candidate, the board documents its assessment of the candidate in writing.

(a) If the board's assessment of the candidate is favorable, then the board will recommend granting the qualification.

(b) If the board identifies minor areas of weakness that can be remediated by additional review, then the candidate will have a subsequent discussion with the board chairperson or assigned member of the board, who will then recommend qualification. If the additional reviews (also called "look ups") are not completed to the satisfaction of the board chairperson or assigned member of the board, the board will decide what additional work, if any, is required of the candidate before recommending qualification.

(c) If the board has identified areas of weakness requiring more extensive remediation, then the board will identify the areas for improvement in writing and recommend that the candidate appear before another board for reexamination when the remediation activities are completed. The candidate, the board, and the candidate's immediate supervisor will agree on a schedule for reexamination.

(d) If the board has identified performance deficiencies that could not be successfully addressed with a remediation effort, then the board will document the full scope of the deficiencies and recommend that the candidate not be qualified.

4. Reexamination Board. A reexamination board must include at least one member from the original board. The board's questioning during reexamination will focus on the area(s) of identified weakness. The board may explore any area in which weakness is identified during the conduct of the reexamination.

5. Board Documentation. The board will send its recommendation by memorandum to division management with the candidate, the candidate's immediate supervisor, and division training coordinator on distribution. Division management will approve or disapprove of the board's recommendation.

6. If division management has been delegated the authority by the office director or regional administrator to certify qualification, division management will inform the candidate, the candidate's immediate supervisor, and division training coordinator whether the candidate is qualified. If division management has not been delegated the authority by the office director or regional administrator to certify qualification, division management will forward the board's recommendation and division management's endorsement to the office director or regional administrator for review. If the candidate is determined to be qualified, a qualification certificate will be signed by the regional administrator, the office director, or their designee. The certificate will identify the effective date of the certification. This date determines when refresher training is due for each qualified staff member.

1248-09 INTERIM QUALIFICATIONS

A candidate who has not completed all of the requirements for final certification in his or her qualification program may obtain interim qualification to independently perform his or her specific work activities in the discipline for which prescribed training has been completed. The candidate's immediate supervisor, in consultation with the qualified or senior staff assigned to work with the candidate, if used, will recommend whether to grant the candidate an interim qualification after evaluating the candidate's body of work. The candidate's immediate supervisor and qualified or senior staff assigned to work with the candidate, if used, will identify the categories for which interim qualification is appropriate. The candidate's immediate supervisor will generate a request for interim qualification in the identified areas. The request shall be approved by the regional administrator, office director, or their designee. Approval of interim qualification will be documented and a record kept in the candidate's training file. Additional interim qualifications can be obtained before full qualification and certification as skills improve and increase.

1248-10 PROGRAM REVISIONS

This chapter and qualification journals are periodically revised to reflect the training needs of candidates and staff already qualified as determined by changes to FSME program area procedures. When new revisions are issued, personnel who qualified under previous requirements, including IMC-1246, shall remain qualified, but must complete any new required classroom training requirements in their discipline within 3 years from the date of the revision.

Candidates in the process of qualifying when new revisions are issued will transition to and complete their qualification under the new program. Candidates will be given credit in the new program for activities completed under the old program. Waivers to specific new training requirements and extensions to the 3-year period can be granted using the procedures outlined in Section 1248-11.

1248-11 EXCEPTIONS

11.01 Candidates possessing sufficient knowledge to meet minimum requirements, through education and prior experience, may be waived from any and all requirements, including the qualification board. Requests for such exceptions must be made from the candidate's immediate supervisor by memorandum to division management. Such requests should consider the candidate's ability to perform work activities without the benefit of the additional knowledge and regulatory perspective gained by completing the training requirements of the qualification journals.

Division management will approve, disapprove, or approve and disapprove in part the immediate supervisor's exception request and will inform the candidate, the candidate's immediate supervisor, and division training coordinator. If the exception approval will result in the candidate becoming eligible for certification, and the office director or regional administrator has delegated authority for certification to division management, division management will inform the candidate, the candidate's immediate supervisor, and division training coordinator whether the candidate is qualified. If the office director or regional administrator has not delegated division management the authority to certify qualification, division management will forward the board's recommendation and division management's endorsement to the office director or regional administrator for review. If the candidate is determined to be qualified, a qualification certificate should be signed by the regional administrator, the office director, or the designee. The certificate will identify the effective date of the certification.

11.02 Staff qualified for one discipline covered in this Manual Chapter need not duplicate qualification requirements that are common for another discipline. Justification for accepting previous experience and training to meet program requirements must be documented in the candidate's training record. After completing the additional training required for the new discipline, the candidate may receive qualification without the need of a qualification board; however, the regional administrator, office director, or their designee has the right to require the candidate to have a qualification board if he or she believes the discipline currently qualified for is too different from the discipline qualification being requested. Requests for such an additional qualification must be made from the candidate's immediate supervisor by memorandum to division management.

Division management will approve or disapprove the immediate supervisor's recommendation and, if division management has been delegated the authority by the office director or regional administrator to certify qualification, division management will inform the candidate, the candidate's immediate supervisor and division training coordinator whether the candidate is qualified. If division management has not been delegated the authority by the office director or

regional administrator to certify qualification, division management will forward the immediate supervisor's recommendation and division management's endorsement to the office director or regional administrator for review. If the candidate is certified, the division training coordinator will create and issue a qualification certificate to be signed by the regional administrator, the office director, or the designee. The certificate will identify the effective date of the certification. This date determines when refresher training is due for each qualified staff member.

1248-12 REFRESHER TRAINING

Qualified personnel are expected to maintain their qualification by completing refresher training in the established requalification cycle. The specific refresher training requirements may be found in the appendices to this Manual Chapter. In accordance with Section 1248-11 of this Manual Chapter, the requirement for receiving refresher training can be waived under special circumstances by division management when it is concluded that the qualified individual does not require refresher training.

Refresher training may consist of either health and safety or security topics. Examples of training that may be considered include: Health Physics Topics (H-401), NRC technical training courses, external training courses, directed self-study courses related to health and safety or security, or other training approved by the qualified staff member's supervisor. Before taking refresher training, the qualified staff member should receive approval from his or her immediate supervisor to confirm that the training will be credited as refresher training. In making this decision, the immediate supervisor should take into consideration the objectives of the training and the qualified staff member's specific training needs. If the supervisor is unsure if a specific training course is appropriate, he or she should consider consulting with HRTD staff for their analysis of the training.

END

Attachments:
Attachment 1: Revision History

Appendices:

Appendix A, Materials Health Physics License Reviewer Qualification Journal
Appendix B, Materials Health Physics Inspector Qualification Journal
Appendix C, Training Requirements and Qualification Journal for Materials Exempt Distribution License Reviewers
Appendix D, Training Requirements and Qualification Journal for Byproduct Material Sealed Source and Device Reviewers
Appendix E, Training Requirements and Qualification Journal for Division of Waste Management Inspectors and License Reviewers
Appendix F, Training Requirements and Qualification Journal for Decommissioning Inspectors
Appendix G, Training Requirements and Qualification Journal for Decommissioning Project Managers/Technical Reviewers
Appendix H, Training Requirements and Qualification Journal for Uranium Recovery Inspectors
Appendix I, Training Requirements and Qualification Journal Uranium Project Managers/Technical Reviewers

Attachment 1

Revision History for IMC 1248

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment and Feedback Resolution Accession Number
N/A	ML12240A129 04/19/13 CN 13-011	This is the initial issuance of IMC 1248, which is being issued to remove FMSE training requirements and qualification journals from the IMC 1246 NMSS series.	n/a	ML12240A129

U.S. NUCLEAR REGULATORY COMMISSION

DIRECTIVE TRANSMITTAL

TN: DT-04-03

To:	NRC Management Directives Custodians
Subject:	Transmittal of Management Directive 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)"
Purpose:	Directive and Handbook 5.6 are being revised to incorporate recommendations from two working group reports; directions from the Management Review Board; additional enhancements identified since 2002; and to provide updated revisions based on the Office of State and Tribal Programs name change.
Office and Division of Origin:	Office of State and Tribal Programs
Contact:	Kathleen N. Schneider, 301-415-2320
Date Approved:	November 5, 1999 **(Revised: February 26, 2004)**
Volume:	5 Governmental Relations and Public Affairs
Directive:	5.6 Integrated Materials Performance Evaluation Program (IMPEP)
Availability:	Rules and Directives Branch Office of Administration Michael T. Lesar, 301-415-7163 Christy Moore, 301-415-7086

Integrated Materials Performance Evaluation Program (IMPEP)

Directive 5.6

Contents

Integrated Materials Performance Evaluation Program (IMPEP) Directive 5.6

Policy

(5.6-01)

It is the policy of the U.S. Nuclear Regulatory Commission to evaluate the NRC regional materials programs and Agreement State radiation control programs in an integrated manner, using common and non-common performance indicators, to ensure that public health and safety is being adequately protected.

Objectives

(5.6-02)

- To establish the process by which the Office of Nuclear Material Safety and Safeguards and the Office of State and Tribal Programs conduct their periodic assessments to determine the adequacy of their programs in the NRC regions and Agreement States. (021)

- To provide NRC and Agreement State management with a systematic and integrated approach to evaluate the strengths and weaknesses of their nuclear material licensing and inspection programs. (022)

- To provide significant input to the management of the regulatory decisionmaking process and indicate areas in which NRC and the Agreement States should dedicate more resources or management attention. (023)

Organizational Responsibilities and Delegations of Authority
(5.6-03)

Deputy Executive Director for Materials, Research and State Programs (DEDMRS)
(031)

- Oversees the integrated materials performance evaluation program (IMPEP). (a)
- Chairs management review boards (MRBs). (b)
- Signs final reports issued to each region and Agreement State. (c)

Directors, Office of Nuclear Material Safety and Safeguards (NMSS) and Office of State and Tribal Programs (STP)
(032)

- Implement the IMPEP within NMSS and STP. Provide staffing support and training for review teams. (a)
- Establish a schedule and develop a detailed review regimen for conducting the reviews in each region and Agreement State. (b)
- Monitor the IMPEP process; evaluate and develop IMPEP policy, criteria, and methodology; and assess the uniformity and adequacy of the implementation of the program. (c)
- Prepare final reports for each region and State for consideration by the MRB and signature by the DEDMRS. (d)
- Participate on MRBs. (e)

Organizational Responsibilities and Delegations of Authority
(5.6-03) (continued)

Directors, Office of Nuclear Material Safety and Safeguards (NMSS) and Office of State and Tribal Programs (STP)
(032) (continued)

- Coordinate with Agreement States to provide appropriate representatives for IMPEP reviews and MRB meetings. (f)

General Counsel (GC)
(033)

Participates on MRBs.

Regional Administrators
(034)

- Implement the IMPEP within their respective regions. (a)
- Provide staffing support for review teams, as needed. (b)

Applicability
(5.6-04)

The policy and guidance in this directive and handbook apply to all NRC employees.

Handbook
(5.6-05)

Handbook 5.6 describes the performance indicators that will be used, the performance standards against which these indicators

Handbook
(5.6-05) (continued)

will be evaluated, and the frequency and process sequence to be employed. The Glossary in the handbook also defines the most commonly used key terminology.

References
(5.6-06)

Code of Federal Regulations, Title 10, "Energy."

NRC "Statement of Principle and Policy for the Agreement State Program; Policy Statement on Adequacy and Compatibility of Agreement State Programs," 62 FR 46517, September 3, 1997.

NRC Inspection Manual—

Chapter 0610, "Inspection Reports."

Chapter 1246, "Formal Qualification Programs in the Nuclear Material Safety and Safeguards Program Area."

Chapter 2600, "Fuel Cycle Facility Operational Safety and Safeguards Inspection Program."

Chapter 2604, "Licensee Performance Review."

Chapter 2605, "Decommissioning Procedures for Fuel Cycle and Materials Licensees."

Chapter 2800, "Materials Inspection Program."

Chapter 2801, "Uranium Mill and 11e.(2) Byproduct Material Disposal Site and Facility Inspection Program."

Inspection Procedure 87104, "Decommissioning Inspection Procedure for Materials Licensees."

References

(5.6-06) (continued)

Inspection Procedure 88104, "Decommissioning Inspection Procedure for Fuel Cycle Facilities."

NRC Management Directive 5.9, "Adequacy and Compatibility of Agreement State Programs."

NRC Office of State and Tribal Programs Procedures—

SA-113, "Placing an Agreement State on Probation."

SA-114, "Suspension of a Section 274b Agreement."

SA-115, "Termination of a Section 274b Agreement."

SA-116, "Periodic Meetings With Agreement States Between IMPEP Reviews."

SA-122, "Heightened Oversight and Monitoring."

SA-200, "Compatibility Categories and Health and Safety Identification for NRC Regulations and Other Program Elements."

SA-201, "Review of State Regulatory Requirements."

SA-300, "Reporting Material Events."

Integrated Materials Performance Evaluation Program (IMPEP)

Handbook

5.6

Contents

Part I

Part II

Contents (continued)

Part III

Contents (continued)

Part III (continued)

Contents (continued)

Part III (continued)

Part IV

Part I
Evaluation

Evaluation Frequency (A)

NRC will review the performance of each region and each Agreement State on a periodic basis. The schedule for conducting each regional or Agreement State visit will be developed by the Office of Nuclear Material Safety and Safeguards (NMSS) and the Office of State and Tribal Programs (STP) in coordination with the regions and States. Approximately 8 to 10 reviews will be scheduled in most years. Under normal conditions, this schedule would allow evaluations of NRC regions and Agreement States every 4 years. However, these frequencies can be adjusted downward on the basis of the findings from the last review, or in light of significant program changes in a particular State or region. In addition, this schedule provides for review of certain NMSS headquarters functions on an as-needed basis.

Evaluation Process Sequence (B)

The typical evaluation process sequence for the integrated materials performance evaluation program (IMPEP) reviews is summarized below:

- Develop the review schedule for the year. (1)
- Assemble and train team members. (2)
- Designate a team leader and members for each scheduled review. (3)
- Transmit questionnaires to affected regions and States. (4)
- Provide to team members a copy of questionnaire responses and the most current information on the region or Agreement State. (5)

Evaluation Process Sequence (B) (continued)

- Assess a sample of inspections at different types of licensed facilities by accompanying inspectors before the onsite portion of the IMPEP. (6)

- Conduct the onsite portion of the IMPEP, using the criteria specified in this handbook and applicable performance review procedures. (7)

- Prepare a draft IMPEP report, with recommendation for overall performance evaluation, for the team leader's signature. (8)

- Issue the draft report to the appropriate regions or States. (9)

- Review and consider written comments received from the regions or Agreement States. (10)

- Prepare the proposed final report for consideration by the management review board (MRB). (11)

- Conduct the MRB meeting. (12)

- Issue final reports; include the written comments received from the regions or Agreement States and any change to the report based on resolution of those comments and a summary of MRB findings. (13)

Part II
Performance Indicators

General (A)

A description of the common and non-common performance indicators to be evaluated, as appropriate, for each region and each Agreement State is given in Sections (B) and (C) of this part. The evaluation criteria (i.e., performance standards) against which these indicators are to be assessed are described in Part III of this handbook. These reviews ensure regional programs provide adequate public health and safety and determine program adequacy and compatibility in the Agreement States. The reviews are instrumental in improving State and NRC regional performance, thus ultimately leading to improved licensee performance. The review should be performance based to evaluate whether the protection of public health and safety has been achieved. The outcome of the review should identify potential impacts on public health and safety and the root causes of performance that does not fully meet the criteria. (1)

The performance indicators should be used as a starting point of inquiry. This, in turn, should lead program evaluators to a more careful examination of the underlying conditions, or root causes of potential problem areas. Evaluators may find correlations exist between two or more performance indicators. In this situation, the impact of individual performance symptoms could be compounded when combined with others. Conversely, a regulatory program measured as potentially weak against one particular indicator could, nonetheless, be rated as strong overall if there are sufficient mitigating factors with respect to other indicators. (2)

Certain non-reactor functions that continue to be conducted from NRC headquarters or Region II, such as fuel cycle licensing, fuel cycle inspections, uranium and thorium milling licensing, sealed source and device reviews, and low-level radioactive waste

General (A) (continued)

disposal licensing, are excluded from the set of common indicators because they are not common to the activities of the NRC regions and Agreement States. These functions are incorporated, as appropriate, as non-common indicators contributing to a performance-based evaluation of a program. (3)

For Agreement States, the non-common indicators are compatibility requirements, the sealed source and device evaluation program, the low-level radioactive waste disposal program, and the uranium recovery program. (4)

Common Performance Indicators (B)

Common Performance Indicator 1—Technical Staffing and Training (1)

The ability to conduct effective licensing and inspection programs is largely dependent on having a sufficient number of experienced, knowledgeable, well-trained technical personnel. Under certain conditions, staff turnover could have an adverse effect on the implementation of these programs, and thus could affect public health and safety. (a)

For this performance indicator, qualitative as well as quantitative measures must be considered. In particular, the reason for apparent trends in staffing must be explored, for example— (b)

- Is the rate of turnover and the degree of understaffing symptomatic of a chronic problem or is it merely a short-term phenomenon? (i)
- Why is turnover high? (ii)
- What steps are being taken to address this turnover? (iii)
- What impact is it having on other performance indicators? (iv)

Common Performance Indicators (B) (continued)

Common Performance Indicator 1—Technical Staffing and Training (1) (continued)

Review of staffing also requires a consideration and evaluation of the levels of training and qualification of the technical staff. Newly hired employees must be technically qualified. Professional staff should normally have a bachelor's degree or equivalent training in the physical and/or life sciences. Training requirements for NRC license reviewers and inspectors are specified in NRC Inspection Manual, Chapter 1246. The requirements include a combination of classroom requirements and practical on-the-job training. Some NRC regions impose additional requirements on certain license reviewers or inspectors, depending on their individual responsibilities and the types of licenses they review and/or inspect. (c)

In addition, the qualification process for NRC materials program inspectors includes demonstration of knowledge of relevant sections of the *Code of Federal Regulations*, completion of a qualifications journal, and appearance before a qualifications board. Although Agreement States need not follow NRC Inspection Manual, Chapter 1246, they should have an equivalent program for training and qualification of personnel, and it should be present and adhered to in Agreement State programs. (d)

The evaluation standard measures the overall quality of training available to, and taken by, materials program personnel. The staff should be afforded opportunities for training that are consistent with the needs of the program, such as attendance at counterpart meetings, university programs, technical workshops, and conventions. (e)

Common Performance Indicator 2—Status of Materials Inspection Program (2)

Periodic inspections of licensed operations are essential to ensure that activities are being conducted in compliance with regulatory

Common Performance Indicators (B) (continued)

Common Performance Indicator 2—Status of Materials Inspection Program (2) (continued)

requirements and consistent with good safety practices. The frequency of inspections is specified in NRC Inspection Manual, Chapter 2800, and is dependent on the amount and kind of material, the type of operation licensed, and the results of previous inspections. There must be a capability for maintaining and retrieving statistical data on the status of the inspection program. (a)

Information regarding the number of overdue inspections is a significant measure of the status of an Agreement State's or an NRC region's materials inspection program; reviews also should examine specific cases in detail when the inspection frequency has been significantly exceeded (i.e., by more than 50 percent). The terms "materials inspection" and "overdue core inspection" are defined in the Glossary of this handbook. (b)

Common Performance Indicator 3—Technical Quality of Inspections (3)

This performance indicator provides the qualitative balance to Performance Indicator 2 above, which looks at the status of the inspection program on a quantitative basis. Review team members will accompany a sample of inspectors at different types of licensed facilities to evaluate the knowledge and capabilities of regional and Agreement State inspectors. These accompaniments will occur at a time other than the onsite review of the region or Agreement State to afford the review team sufficient time to observe inspectors at different types of licensee facilities. These reviews focus on the scope, completeness, and technical accuracy of completed inspections and related documentation. Review teams will conduct indepth, onsite reviews of a cross-section of completed inspection reports performed by different inspectors. In addition, review teams will verify that

Common Performance Indicators (B) (continued)

Common Performance Indicator 3—Technical Quality of Inspections (3) (continued)

supervisors generally conduct accompaniments of inspectors on an annual basis to provide management quality assurance.

Common Performance Indicator 4—Technical Quality of Licensing Actions (4)

An acceptable program for licensing radioactive material includes preparation and use of internal licensing guides and policy memoranda to ensure technical quality in the licensing program (when appropriate, NRC guides may be used); pre-licensing inspection of complex facilities; and supervisory review, when appropriate. (a)

This performance indicator evaluates the technical quality of the licensing program on the basis of an indepth, onsite review of a representative cross-section of licensing actions, including license terminations, decommissioning actions and bankruptcies, and various types of licenses. Technical quality includes not only the review of the application and completed actions but also an examination of any renewals that have been pending for more than a year because the failure to act on such requests may have health and safety implications. To the extent possible, the onsite review also should capture a representative cross-section as completed by each of the reviewers in the region or State. (b)

Common Performance Indicator 5—Technical Quality of Incident and Allegation Activities (5)

The quality, thoroughness, and timeliness of a regulator's response to incidents and allegations of safety concerns can have a direct bearing on public health and safety. A careful assessment of incident response and allegation investigation procedures, actual implementation of these procedures, internal and external

Common Performance Indicators (B) (continued)

Common Performance Indicator 5—Technical Quality of Incident and Allegation Activities (5) (continued)

coordination, and investigative and followup procedures and actions will be a significant indicator of the overall quality of the program.

Non-Common Performance Indicators (C)

Non-Common Performance Indicator 1—Compatibility Requirements (1)

State statutes should authorize the State to establish a program for the regulation of agreement material and provide authority for the assumption of regulatory responsibility under the agreement. The statutes must authorize the State to promulgate regulatory requirements necessary to provide reasonable assurance of protection of public health and safety. The State must be authorized through its legal authority to license, inspect, and enforce legally binding requirements, such as regulations and licenses. State statutes should be consistent with Federal statutes, as appropriate. (a)

In accordance with Management Directive 5.9, "Adequacy and Compatibility of Agreement State Programs," and the current revisions of STP Procedures, SA-201, “Review of State Regulatory Requirements," and SA-200, "Compatibility Categories and Health and Safety Identification for NRC Regulations and Other Program Elements," the State shall adopt legally binding requirements, such as regulations and other necessary program elements consistent with the above guidance. (b)

NRC regulations that should be adopted by an Agreement State for purposes of compatibility or health and safety should be adopted in a time frame so that the effective date of the State

Non-Common Performance Indicators (C) (continued)

Non-Common Performance Indicator 1—Compatibility Requirements (1) (continued)

requirement is not later than 3 years after the effective date of NRC's final rule. (c)

Other program elements that have been designated as necessary for maintenance of an adequate and compatible program should be adopted and implemented by an Agreement State within 6 months following NRC designation. (d)

Non-Common Performance Indicator 2—Sealed Source and Device Evaluation Program (2)

Adequate technical evaluations of sealed source and device (SS&D) designs are essential to ensure that SS&Ds used by both licensees and persons exempt from licensing will maintain their integrity and that the design features are adequate to protect public health and safety. Agreement States with authority for SS&D evaluation programs that are not performing SS&D reviews are requested to commit in writing to having an SS&D evaluation program in place (as described in this section) before performing evaluations. NUREG-1556, Volume 3, provides information on conducting SS&D reviews that may provide useful guidance for review teams. Three subelements will be evaluated to determine if the SS&D program is adequate.

- Technical Staffing and Training (a)

  Evaluation of SS&D review staffing and training should be conducted in the same manner and as part of the Common Performance Indicator 1 (Sections (B)(1)(a) and (b) of this part), except with a focus on training and experience commensurate with the conduct of the SS&D reviews. (i)

  The minimum qualifying criteria for SS&D staff authorized to sign registration certificates should be— (ii)

Non-Common Performance Indicators (C) (continued)

Non-Common Performance Indicator 2—Sealed Source and Device Evaluation Program (2) (continued)

– BS/BA, or equivalent experience, in physical and/or life science or engineering (*a*)

– Five-week Applied Health Physics Course (H-109) or equivalent health physics background (*b*)

– Licensing Practices and Procedures Course (G-109) or equivalent training (*c*)

– Inspection Procedures Course (G-108) or equivalent training (*d*)

– One-week NRC course/workshop on SS&D review and evaluations (*e*)

Staff should have a minimum of 1 year of practical related experience and demonstrated ability to conduct adequate SS&D reviews, including being able to— (iii)

– Understand and interpret appropriate prototype tests that ensure the integrity of the products under normal and likely accidental conditions of use (*a*)

– Understand and interpret test results (*b*)

– Read and understand blueprints and drawings (*c*)

– Understand how the device works and how safety features operate (*d*)

– Understand and apply the appropriate regulations (*e*)

– Understand the conditions of use (*f*)

Non-Common Performance Indicators (C) (continued)

Non-Common Performance Indicator 2—Sealed Source and Device Evaluation Program (2) (continued)

– Understand external dose rates, source activities, and nuclide chemical form (*g*)

– Understand and utilize basic knowledge of engineering materials and their properties (*h*)

- Technical Quality of the Product Evaluation Program (b)

  The technical quality of the product evaluation program on the basis of an indepth onsite review of a representative cross-section of evaluations performed includes various types of products and types of actions: (i)

  – Product evaluations should be technically accurate and ensure that proper prototype tests or analyses have been performed and passed for the normal and likely accidental conditions of use and that the safety features of the device are adequate to protect public health and safety. (*a*)

  – Completed registration certificates and the status of obsolete registration certificates and registration certificates for products having defects or having been involved in incidents must be clearly and promptly transmitted to NRC, Agreement States, and others, as appropriate. (*b*)

  – Vendors' quality assurance and control programs should be evaluated to ensure that products are built to the same specifications as those listed on the registration certificate. The commitments made in the registrant's application and referenced in the registration certificate must be enforceable. (*c*)

Non-Common Performance Indicators (C) (continued)

Non-Common Performance Indicator 2—Sealed Source and Device Evaluation Program (2) (continued)

To the extent possible, the onsite review also should capture a representative cross-section as completed by each of the State reviewers. (ii)

- Evaluation of Defects and Incidents Regarding SS&Ds (c)

Reviews of SS&D incidents should be conducted in the same manner and as part of the Common Performance Indicator 5 (Section (B)(5) of this part) to detect possible manufacturing defects and the root causes of these incidents. The incidents should be evaluated to determine if other products may be affected by similar problems. Appropriate action and notifications to NRC, Agreement States, and others, as appropriate, should occur in a timely manner.

Non-Common Performance Indicator 3—Low-Level Radioactive Waste Disposal Program (3)

Five subelements will be evaluated to determine if an Agreement State's performance of its low-level radioactive waste disposal program is adequate.

- Technical Staffing and Training (a)

Evaluation of staffing and training should be conducted in the same manner and as part of the Common Performance Indicator 1 (Sections (B)(1)(a)-(d) of this part), unless the low-level radioactive waste program is organizationally separate from the materials program. The staffing (which can include contractual support or support from other State agencies) should be sufficient to enable the program to complete review of a new application within 15 months, if practicable, in accordance with the Low-Level Radioactive

Non-Common Performance Indicators (C) (continued)

Non-Common Performance Indicator 3—Low-Level Radioactive Waste Disposal Program (3) (continued)

Waste Policy Amendments Act. Professional staff should normally have bachelor's degrees or equivalent training in the physical, life or earth sciences, or engineering. Staff and support contractors' qualifications, training, and experience also should include the disciplines of health physics, civil or mechanical engineering, geology, hydrology and other earth sciences, and environmental science.

- Status of Low-Level Radioactive Waste Disposal Inspection (b)

  Periodic inspections of low-level radioactive waste disposal facilities, from the pre-operational through the post-closure phase, are essential to ensure that activities are being conducted in compliance with regulatory requirements and consistent with good safety practices. (i)

  – Inspections during siting and construction phases are essential to ensure the facility is being sited and constructed in accordance with regulatory and license requirements. (*a*)

  – Operational phase inspections are essential for ensuring that disposal activities are being conducted in accordance with license conditions and regulatory requirements. (*b*)

  – Closure and post-closure inspections are essential to ensure activities at closure are being conducted in compliance with the regulatory requirements and the facility is performing as expected. (*c*)

  The frequency of inspections for operating low-level radioactive waste disposal facilities is specified in NRC Inspection Manual, Chapter 2800, as yearly. Inspection frequencies for non-operational phase inspections should be established. There

Non-Common Performance Indicators (C) (continued)

Non-Common Performance Indicator 3—Low-Level Radioactive Waste Disposal Program (3) (continued)

must be a capability for maintaining and retrieving statistical data on the status of the inspection program for the low-level radioactive waste disposal program. (ii)

- Technical Quality of Inspections (c)

  This subelement provides the qualitative balance to subelement b above, which looks at the status of the inspection program on a quantitative basis. Review team members will accompany Agreement State inspectors, including onsite resident inspectors, to evaluate their knowledge and capabilities at low-level radioactive waste disposal facilities during the inspections discussed in subelement b above. These accompaniments will usually occur at a time other than the onsite review of the region or Agreement State. Reviews in this area focus on the scope, completeness, and technical accuracy of inspections and related documentation. Review teams will conduct indepth, onsite reviews of completed inspection reports.

- Technical Quality of Licensing Actions (d)

  An acceptable program for licensing low-level radioactive waste disposal facilities ensures that the proposed waste disposal facilities will meet State licensing requirements for waste product and volume, qualifications of personnel, site characterization, performance assessment, facilities and equipment, operating and emergency procedures, financial qualifications and assurances, closure and decommissioning procedures, and institutional arrangements in a manner sufficient to establish a basis for licensing action. This program may be accomplished through the preparation and use of

Non-Common Performance Indicators (C) (continued)

Non-Common Performance Indicator 3—Low-Level Radioactive Waste Disposal Program (3) (continued)

internal licensing guides, policy memoranda, or use of NRC equivalent guides. Licensing decisions should be adequately documented through safety evaluation reports, or similar documentation, of the license review and approval process. Opportunities for public hearings are provided in accordance with applicable State administrative procedure laws during the process of licensing a low-level radioactive waste disposal facility. Pre-licensing interactions with the applicant should be conducted to ensure clear communication of the regulatory requirements. (i)

To evaluate the technical quality of the licensing program, a review of a technical aspect of a radioactive waste disposal licensing action (e.g., health physics, hydrology, and structural engineering) will be conducted in addition to an evaluation of the license review process. Technical quality includes not only the review of completed actions but also an examination of any ongoing requests for licenses or renewals that may have health and safety implications. (ii)

- Technical Quality of Incident and Allegation Activities (e)

  Reviews of low-level radioactive waste program incidents and allegations of safety concerns should be conducted in the same manner and as part of Common Performance Indicator 5 (Sections (B)(5) of this part), unless the low-level radioactive waste program is organizationally separate from the materials program.

Non-Common Performance Indicator 4—Uranium Recovery Program (4)

Five subelements, as appropriate, will be evaluated to determine if the performance of the Region IV or an Agreement State's uranium recovery program is adequate.

Non-Common Performance Indicators (C) (continued)

Non-Common Performance Indicator 4—Uranium Recovery Program (4) (continued)

- Technical Staffing and Training (a)

  Evaluation of staffing and training should be conducted in the same manner and as part of Common Performance Indicator 1 (Sections (B)(1)(a)-(d) of this part), unless the uranium recovery program is organizationally separate from the materials program. Professional staff normally should have bachelor's degrees or equivalent training in the physical sciences, life or earth sciences, or engineering. Staff and support contractors' qualifications, training, and experience should include the disciplines of health physics; civil or mechanical engineering; geology, hydrology and other earth sciences; and environmental science.

- Status of the Uranium Recovery Inspection Program (b)

  Periodic inspections of licensed uranium recovery operations are essential to ensure that activities are being conducted in compliance with regulatory requirements and consistent with good safety practices. The frequency of inspections is specified in the NRC Inspection Manual, Chapter 2600, for in situ leach mining facilities and in Chapter 2801 for conventional uranium and thorium mills. Uranium recovery facilities that are on standby or under decommissioning also should be inspected at that frequency. Inspections should occur more frequently if significant regulatory concerns develop, before major changes are made to operations, or if generic problems are identified. There must be a capability for maintaining and retrieving statistical data on the status of the inspection program for the uranium and thorium program.

Non-Common Performance Indicators (C) (continued)

Non-Common Performance Indicator 4—Uranium Recovery Program (4) (continued)

- Technical Quality of Inspections (c)

  This subelement provides the qualitative balance to subelement b above, which looks at the status of the inspection program on a quantitative basis. Review team members will accompany the region and Agreement State inspectors to evaluate their knowledge and capabilities at uranium recovery facilities. These accompaniments will usually occur at a time other than the onsite review of the region or Agreement State. An acceptable program for conducting inspections for radioactive material licenses includes preparation and use of internal inspection guides and policy memoranda to ensure technical quality in the inspection program (when appropriate, NRC guidance may be used). Reviews of this subelement focus on the scope, completeness, and technical accuracy of completed inspections and related documentation. Review teams will conduct indepth, onsite reviews of completed inspection reports. In addition, review teams will verify that supervisors generally conduct accompaniments of inspectors on an annual basis to provide management quality assurance.

- Technical Quality of Licensing Actions (d)

  An acceptable program for licensing uranium recovery activities ensures that essential elements of NRC licensing requirements for radiation protection, qualifications of personnel, facilities and equipment, operating and emergency procedures, financial qualification and assurance, closure and decommissioning procedures, and institutional arrangements are met in a manner sufficient to establish a basis for licensing action. This program may be accomplished through the preparation and use of internal licensing guides, policy memoranda, or use of NRC equivalent guides to ensure

Non-Common Performance Indicators (C) (continued)

Non-Common Performance Indicator 4—Uranium Recovery Program (4) (continued)

technical quality in the licensing program. Pre-licensing inspection of complex facilities are conducted, when appropriate. (i)

To evaluate the technical quality of the Agreement State licensing program, an indepth review of an aspect of the uranium recovery license (e.g., radiation protection, hydrology, or geotechnical engineering) will be conducted. Technical quality includes not only the review of completed actions but also an examination of any ongoing requests and license renewals that may have health and safety implications. Technical quality includes review of the State's compliance with the statutory requirements or prohibitions in Section 274 of the Atomic Energy Act, as amended. (ii)

- Technical Quality of Incident and Allegation Activities (e)

Reviews of uranium recovery program incidents and allegations of safety concerns should be conducted in the same manner and as part of Common Performance Indicator 5 (Section (B)(5) of this part), unless the uranium recovery program is organizationally separate from the materials program.

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (5)

Four subelements, as appropriate, will be evaluated to determine if the performance of the regional fuel cycle inspection program is adequate.

- Technical Staffing and Training (a)

Non-Common Performance Indicators (C) (continued)

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (5) (continued)

The ability to conduct effective inspection programs is largely dependent on having a sufficient number of experienced, knowledgeable, well-trained technical personnel. Fuel cycle inspectors generally require extensive training in specialized technical areas, in addition to meeting academic requirements. These requirements often result in significant time delays before newly hired inspectors can become certified as qualified NRC fuel cycle inspectors. Under certain conditions, staff turnover could have an adverse effect on the implementation of a region's fuel cycle inspection program, and thus could affect public health and safety. For small programs, their viability may depend upon the continued availability of a single individual with skills and experience that would be difficult to replace with another individual. (i)

Plans should be in place to replace the functional capabilities required for each aspect of the program (perhaps by contributions from several different individuals), in case a key inspector becomes unavailable (e.g., cross-training of other staff in the same organization, identification of individuals with required skills and qualifications in other NRC organizations, identification of possible outside contractors with suitable experience or expertise to augment specified types of inspections, if needed). (ii)

Qualitative as well as quantitative measures must be considered; in particular, the reason for apparent trends in staffing must be explored: (iii)

– Is the rate of turnover or the degree of understaffing symptomatic of a chronic problem, or is it merely a short-term phenomenon? (*a*)

– Why is turnover high? (*b*)

Non-Common Performance Indicators (C) (continued)

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (5) (continued)

– Are inspectors being overburdened? (*c*)

– Is high turnover related to a morale problem? (*d*)

– What steps are being taken to address the basic problem? (*e*)

– What impact is high turnover having on other performance indicator subelements? (*f*)

Review of staffing also requires a consideration and evaluation of the levels of training and qualification of the technical staff and management. New hires need to be technically qualified. Professional staff normally should have bachelor's degrees or equivalent training in the physical and/or life sciences, or related engineering fields. Training requirements for NRC fuel facility specialist inspectors are specified in NRC Inspection Manual, Chapter 1246. The requirements include a combination of classroom requirements and practical on-the-job training. In addition, the qualification process includes demonstration of knowledge of relevant sections of the *Code of Federal Regulations*, completion of a qualifications journal, and satisfactory review before a qualifications board. There also are refresher training and retraining requirements, including taking new fuel cycle courses as they are developed. (iv)

The small number of fuel cycle facility inspectors who may need training at any one particular time poses unique challenges to arranging for the proper training of these individuals on a cost-effective basis. The region may have to seek outside training opportunities to provide inspectors with specific safety knowledge needed for unique aspects of their facilities (e.g., heavy duty overhead cranes). (v)

Non-Common Performance Indicators (C) (continued)

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (5) (continued)

After an inspector is trained and initially qualified to perform inspections in a specific technical area, providing additional cross-training opportunities for inspectors will increase the ability of the inspection organization to better respond to facility incidents, unexpected staff turnover, or other unusual situations. (vi)

- Status of Fuel Cycle Inspection Program (b)

Periodic inspections of licensed operations are essential to ensure that activities are being conducted in compliance with regulatory requirements and license commitments, and in an overall safe and adequate manner. (i)

The appropriate frequencies of inspections for established procedures are discussed in NRC Inspection Manual, Chapter 2600. Chapter 2600 provides flexibility to adjust the frequencies, focus, and intensiveness of inspections for different functional areas at a licensed facility, taking into account the complexity, risk level, and previous operating history of the facility. These adjustments are generally determined by consensus of headquarters and regional management during the licensee performance review (LPR) process, or in response to significant facility events or conditions between LPRs. (ii)

The level of resources provided for an inspection also may be adjusted. Unexpected external influences (e.g., turnover of key staff, diversion of staff for an augmented inspection team [AIT], incident investigation teams, or other inspections in response to incidents, accretion of new regulatory responsibilities without timely provision of additional resources) may occasionally affect the frequencies with which routine

Non-Common Performance Indicators (C) (continued)

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (5) (continued)

inspections can be conducted, or the level of resources available for routine inspections. These influences should be documented and reviewed on a regular basis and integrated into each facility's portion of the fuel cycle master inspection plan. The master inspection plan also should include scheduling of LPRs according to the frequencies specified in NRC Inspection Manual, Chapter 2604. (iii)

Inspection scheduling and planning should consider the resource requirements for both routine and reactive inspection efforts, preparation for and documentation of inspections, and participation in other programmatic duties (e.g., training, licensee performance reviews, licensing support, or participation in or support for enforcement conferences). This planning should permit adequate time for inspectors to complete inspection reports so that the reports can be issued in accordance with the timeliness requirements contained in NRC Inspection Manual, Chapter 0610. Other planning and scheduling factors include concern for unusual impacts on licensees and exchanges of inspection resources between different regions. The established fuel cycle inspection schedule for the region should reflect these considerations. (iv)

Regional management should monitor the region's inspection program to ensure that the current program is being implemented in accordance with the requirements of the fuel facility inspection program described in NRC Inspection Manual, Chapter 2600, the documented inspection plan for each facility, and overall regional objectives. There should be a capability for maintaining and readily retrieving (without additional analytical effort) the necessary information for demonstrating the extent to which established inspection program objectives are being met. (v)

Non-Common Performance Indicators (C) (continued)

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (5) (continued)

There should be a means for maintaining and readily retrieving regional performance information for each facility. This information may reside in inspection reports, correspondence files, the inspection followup system, or the Nuclear Materials Events Database (NMED). Where there are several different inspectors inspecting each facility, the region may find it more practical to maintain its own summary information files (e.g., site issues matrices, incident analysis summaries, enforcement histories) to assemble the kind of information needed to support the fuel cycle licensee performance review program and to justify any changes in the inspection program for a facility as they occur. (This step would prevent the loss of summary information valuable to the LPR, which is normally provided by the inspectors, if they are not available at the time the LPR is conducted.) Such programmatic changes should be documented at the time they are made. LPRs should be conducted in cooperation with headquarters according to the schedule included in the fuel cycle master inspection plan. (vi)

The reviewer should examine specific instances in which established inspection program objectives appear not to be met and determine if mitigating circumstances may have been documented to offer justification for departures from the established plans. (vii)

- Technical Quality of Inspections (c)

  This subelement provides the qualitative balance to subelement b above, which looks at the status of the inspection program on a quantitative basis. (i)

  Reviews of programs under this subelement focus on the scope, completeness, and technical accuracy of completed inspections and related documentation. The reviewer will

Non-Common Performance Indicators (C) (continued)

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (5) (continued)

conduct indepth, onsite reviews of a cross-section of completed inspection reports, selecting from among those performed by different inspectors, if applicable. The reviewer also may interview the respective inspectors, if they are available. (ii)

The reviewer will verify that supervisors accompany inspectors on an annual basis to provide management quality assurance. (iii)

Inspection efforts should focus on the licensee's performance in ensuring the safety and safeguarding of operations. Inspection reports should reflect this focus by addressing licensee performance issues regarding plant operations posing the greatest safety or safeguards risks and where previous performance issues have been identified as requiring greater attention, consistent with the inspection program previously documented for the facility. (iv)

Conversely, the results of inspections should be summarized and appropriately documented for later reference (e.g., for support of the licensee performance review program). (v)

Only qualified NRC inspectors are to conduct inspections on their own. When inspector trainees or contractors are included in an inspection visit, at least one qualified NRC inspector should be designated to lead the inspection. In these cases, the qualified inspector should provide guidance to such personnel trainees or contractors to ensure that their activities are appropriate to an NRC inspection. (vi)

- Technical Quality of Incident and Allegation Activities (d)

Non-Common Performance Indicators (C) (continued)

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (5) (continued)

The quality, thoroughness, and timeliness of a regulator's response to incidents and allegations can have a direct bearing on public health and safety. (i)

Significant indicators of the overall quality of the fuel cycle facility inspection program will include detailed written procedures for incident response and the maintenance of records and reports of actual incidents, focusing on internal and external coordination, and analytical, investigative, and followup procedures. (ii)

The region should exhibit a readiness to respond, in conjunction with headquarters, to major incidents that may arise at a facility. These response activities will include a review of preparations in place at the region's incident response center (e.g., identification of individuals with required skills, facility data for use during emergencies, detailed preparations for responding to the highest risk types of incidents postulated for the facility, on the basis of known facility processes and source terms, etc.). (iii)

The region, possibly in coordination with headquarters, should conduct, or participate in, documented followup self-assessments of drills and responses to any major incidents that involved activation of the region's incident response center. (iv)

The region's responses to any allegations involving fuel cycle facilities should be grounded in established inspection procedures and good technical and regulatory analysis to determine if regulations were followed or if they may be deficient and in need of revision with regard to a significant safety issue brought to light by the allegation. (v)

Non-Common Performance Indicators (C) (continued)

Non-Common Performance Indicator 6—Site Decommissioning Management Plan (SDMP) (6)

Six subelements, as appropriate, will be evaluated to determine if the performance of the regional site decommissioning management plan (SDMP) is adequate.

- Staff Qualifications (a)

  License reviewers and inspectors are qualified through training and experience to review the safety of decommissioning. Qualifications for license reviewers and inspectors are established and reviewed. Staff members are qualified to perform licensing reviews and inspections related to decommissioning through training and documented work experience. Non-qualified staff members are subject to the direct supervision of qualified managers; this supervision is evidenced by concurrence on inspection reports and licensing documentation.

- Quality of SDMP Decommissioning Reviews (b)

  NRC staff reviews and approves planned, significant decommissioning actions at facilities that are listed on the SDMP in advance of decommissioning. Decommissioning plan reviews are conducted in accordance with NRC Inspection Manual, Chapter 2605; current NRC policies; standard review procedures; and other regulatory guidance. Reviews are documented as outlined in Chapter 2605, using environmental assessments, environmental impact statements, safety evaluation reports, checklists, interrogatories, and other written correspondence, as appropriate.

- Financial Assurance for Decommissioning (c)

  Adequate financial assurance for the decommissioning of SDMP sites has been established in accordance with

Non-Common Performance Indicators (C) (continued)

Non-Common Performance Indicator 6—Site Decommissioning Management Plan (SDMP) (6) (continued)

regulatory requirements and applicable guidance. Financial assurance is provided for estimated costs for an independent third party to perform decommissioning with the objective of releasing the site, unless alternative arrangements have been approved by the regulator. Financial assurance mechanisms are reviewed and maintained to ensure that they would be executable and provide sufficient funding for decommissioning in the event that the licensee liquidates or is otherwise unable to pay for decommissioning.

- Termination Radiological Surveys (d)

  Sufficient radiological surveys are required before license termination and site release, as outlined in NRC Inspection Manual, Chapter 2605, to ensure that residual radioactivity levels comply with release criteria. Licensee survey results are validated through a closeout inspection or confirmatory survey, also outlined in Chapter 2605, given the extent and significance of any residual contamination.

- Inspections (e)

  Decommissioning projects are inspected in accordance with established frequencies and with written inspection procedures to confirm the safety of decommissioning procedures. Inspections are documented and carried out in accordance with NRC Inspection Procedures 87104 and 88104. Inspections focus on safety of licensee procedures, release of effluents to the environment, public and worker exposure, and suitability of decontaminated areas and structures for release.

Non-Common Performance Indicators (C) (continued)

Non-Common Performance Indicator 6—Site Decommissioning Management Plan (SDMP) (6) (continued)

- SDMP Milestones (f)

  The decommissioning milestones summarized in the SDMP are being met. If not, delays are identified and there is a mechanism in place to ensure that any appropriate corrective actions are taken. Policy issues affecting the decommissioning of SDMP sites are being identified. Staff is updating the SDMP database in a timely manner.

Part III
Evaluation Criteria

NRC regions and Agreement States will be evaluated in their ability to conduct effective licensing and inspection programs using the common and non-common performance indicators, described in Part II of this handbook, as appropriate. The evaluation criteria for each performance indicator are given below. These criteria do not represent an exhaustive list of the factors that may be relevant in determining performance. In some cases, there may be additional considerations not listed here that are indicative of a program's performance in a particular area. For the non-common performance indicators that contain subelements, a single finding for the overall performance of the non-common performance indicator will be made by the review team. If the review team finds that a State's performance is satisfactory for all subelements evaluated for the non-common performance indicator, the State's performance for this indicator should be found satisfactory. If the review team finds that a State's performance is satisfactory but needs improvement for one or two subelements within the non-common performance indicator and is satisfactory for all remaining subelements, the review team should consider whether the State's performance is satisfactory or is satisfactory but needs improvement for this indicator. If the review team finds that a State's performance is unsatisfactory for one or two subelements within the non-common performance indicator, the review team should consider whether the State's performance is unsatisfactory or is satisfactory but needs improvement for this indicator.

Common Performance Indicator 1—Technical Staffing and Training (A)

Satisfactory (1)

Review indicates implementation of a well-conceived and balanced staffing strategy throughout the assessment period and demonstrates the qualifications of the technical staff. This

Common Performance Indicator 1—Technical Staffing and Training (A) (continued)

Satisfactory (1) (continued)

performance is indicated by the presence of most of the following features:

- There is a balance in staffing the licensing and inspection programs. (a)

- There are few, if any, vacancies, especially at the senior-level positions. (b)

- There is prompt management attention and review, such as development of a corrective action plan to address problems in high rates of attrition or positions being vacant for extended periods. (c)

- Qualification criteria for hiring new technical staff are established and are being followed. (Staff would normally be expected to have bachelor's degrees or equivalent training in the physical and/or life sciences. Senior personnel should have additional training and experience in radiation protection commensurate with the types of licenses they issue or inspect.) (d)

- License reviewers and inspectors are trained and qualified in a reasonable time period. For the regions, this means there has been, and continues to be, a clear effort to adhere to the requirements and conditions specified in NRC Inspection Manual, Chapter 1246, and the applicable qualifications journals, or to receive equivalent training elsewhere. For the Agreement States, equivalent requirements should be in place and followed. (e)

- Management commitment to training is clearly evident. (f)

Common Performance Indicator 1—Technical Staffing and Training (A) (continued)

Satisfactory, But Needs Improvement (2)

Review determines the presence of some of the following conditions:

- Some staff turnover that could adversely upset the balance in staffing the licensing and inspection programs. (a)
- Some vacant positions not readily filled. (b)
- Some evidence of lack of management attention or actions to deal with staffing problems. (c)
- Some of the licensing and inspection personnel not making prompt progress in completing all of the training and qualification requirements. (d)
- The training and qualification standards include areas needing improvement. (e)
- Some of the new staff is hired with little education or experience in physical and/or life sciences, or materials licensing and inspection. (f)

Unsatisfactory (3)

Review determines the presence of chronic or acute problems related to some of the following conditions, which cause concerns about their likely effects on other performance indicators:

- There is significant staff turnover relative to the size of the program. (a)
- Most vacant positions are not filled for extended periods. (b)

Common Performance Indicator 1—Technical Staffing and Training (A) (continued)

Unsatisfactory (3) (continued)

- There is little evidence of management attention or actions to deal with staffing problems. (c)

- Most of the licensing and inspection personnel are not promptly completing all of the training and qualification requirements. (d)

- New staff members are hired without the scientific or technical backgrounds that would equip them to receive technical training. (e)

Category N (4)

Special conditions exist that provide justification for withholding a rating. For example, there has been a substantial management effort to deal with staffing problems. NMSS or STP has been kept informed of the situation, and discernable recent progress is evident.

Common Performance Indicator 2—Status of Materials Inspection Program (B)

Satisfactory (1)

- Core licensees (initial inspections and all routine inspections of Priority 1, 2, or 3) are inspected at regular intervals in accordance with frequencies prescribed in NRC Inspection Manual, Chapter 2800. (a)

- Deviations from these schedules are normally coordinated between working staff and management. Deviations are generally the result of joint decisions that consider the risk of licensee operation, past licensee performance, and the need

Common Performance Indicator 2—Status of Materials Inspection Program (B) (continued)

Satisfactory (1) (continued)

to temporarily defer the inspection(s) to address more urgent or more critical priorities. (b)

- There is a plan to reschedule any missed or deferred inspections or a basis established for not rescheduling. (c)

- A large majority of the inspection findings are communicated to licensees in a timely manner (30 calendar days as specified in NRC Inspection Manual, Chapter 0610). (d)

Satisfactory, But Needs Improvement (2)

- More than 10 percent of the Priority 1, 2, or 3 licensees are inspected at intervals that exceed the NRC Inspection Manual, Chapter 2800, frequencies by more than 25 percent. Initial inspections that are completed more than 12 months after license issuance are also included in the 10 percent calculation.(a)

- Many of the inspection findings are delayed or not communicated to licensees within 30 days. (b)

Unsatisfactory (3)

- More than 25 percent of the Priority 1, 2, or 3 licensees are inspected at intervals that exceed the NRC Inspection Manual, Chapter 2800, frequencies by more than 25 percent. Initial inspections that are completed more than 12 months after license issuance are also included in the 25 percent calculation. (a)

- Most inspection findings are delayed or not communicated to licensees within 30 days. (b)

Common Performance Indicator 2—Status of Materials Inspection Program (B) (continued)

Category N (4)

Special conditions exist that provide adequate justification for withholding a rating. For example, an unforeseen event or emergency with significant health and safety consequences may have required a temporary diversion of resources from the core inspection program. However, these programmatic adjustments are well thought out, and properly coordinated with Office of Nuclear Material Safety and Safeguards (NMSS) or Agreement State management.

Common Performance Indicator 3—Technical Quality of Inspections (C)

Satisfactory (1)

- Review team members accompanying inspectors combined with an onsite review of a representative cross-section of completed inspection reports indicates inspection findings are usually well founded and well documented throughout the assessment. (a)

- A review of inspector field notes or completed reports indicates that most inspections are complete and reviewed promptly by supervisors or management. (b)

- Procedures are in place and normally used to help identify root causes and poor licensee performance. (c)

- In most instances, followup inspections address previously identified open items and/or past violations. (d)

- Inspection findings generally lead to appropriate and prompt regulatory action. (e)

Common Performance Indicator 3—Technical Quality of Inspections (C) (continued)

Satisfactory (1) (continued)

- Supervisors accompany nearly all inspectors on an annual basis. (f)

Satisfactory, But Needs Improvement (2)

- Review indicates that some inspections do not address potentially important health and safety concerns or it indicates periodic problems with respect to completeness, adherence to procedures, management review, thoroughness, technical quality, and consistency. (a)

- Review indicates that findings in inspection reports and inspection files are, on occasion, not well founded or well documented. (b)

- Review does not demonstrate an appropriate level of management review. (c)

- Accompaniment of inspectors by supervisors is performed nonsystematically. (d)

- Followup actions to inspection findings are often not timely. (e)

Unsatisfactory (3)

- Review indicates that inspections frequently fail to address potentially important health and safety concerns or it indicates chronic problems exist with respect to completeness, adherence to procedures, management review, thoroughness, technical quality, and consistency. (a)

- Supervisors infrequently accompany inspectors. (b)

- Followup actions to inspection findings are often not timely and appropriate. (c)

Common Performance Indicator 3—Technical Quality of Inspections (C) (continued)

Category N (4)

This category is not applicable.

Common Performance Indicator 4—Technical Quality of Licensing Actions (D)

Satisfactory (1)

- Review of completed licenses and a representative sample of licensing files indicates that license reviews are generally thorough, complete, consistent, and of acceptable technical quality. (a)

- Health and safety issues are properly addressed. (b)

- License reviewers have the proper signature authority for the cases they review independently. (c)

- Special license tie-down conditions are usually stated clearly and are inspectable. (d)

- Deficiency letters clearly state regulatory positions and are used at the proper time. (e)

- Reviews of renewal applications demonstrate thorough analysis of a licensee's inspection and enforcement history. (f)

- Applicable guidance documents are available to reviewers and are followed. (g)

Satisfactory, But Needs Improvement (2)

Review indicates that some licensing actions do not fully address health and safety concerns or indicates repeated examples of

Common Performance Indicator 4—Technical Quality of Licensing Actions (D) (continued)

Satisfactory, But Needs Improvement (2) (continued)

problems with respect to thoroughness, completeness, consistency, clarity, technical quality, and adherence to existing guidance in licensing actions.

Unsatisfactory (3)

Review indicates that licensing actions frequently fail to address important health and safety concerns or indicates chronic problems with respect to thoroughness, completeness, consistency, clarity, technical quality, and adherence to existing guidance in licensing actions.

Category N (4)

This category is not applicable.

Common Performance Indicator 5—Technical Quality of Incident and Allegation Activities (E)

Satisfactory (1)

- Incident response and allegation procedures are in place and followed in nearly all cases. (a)
- Actions taken are appropriate, well coordinated, and timely in most instances. (b)
- Level of effort is usually commensurate with potential health and safety significance of an incident. (c)
- Investigative procedures are appropriate for an incident. (d)

Common Performance Indicator 5—Technical Quality of Incident and Allegation Activities (E) (continued)

Satisfactory (1) (continued)

- Corrective (enforcement or other) actions are adequately identified to licensees promptly, and appropriate followup measures are taken to ensure prompt compliance. (e)

- Followup inspections are scheduled and completed, if necessary. (f)

- Notification to NMSS, STP, the Office of Nuclear Security and Incident Response (NSIR), and others, as appropriate, is usually performed in a timely fashion. (g)

Satisfactory, But Needs Improvement (2)

- Incident response and allegation procedures are in place but occasionally are not practiced in a detailed fashion. (a)

- Performance is marginal in terms of resolving potential public health and safety issues but not as well coordinated, complete, or timely as would be required under the "Satisfactory" performance standard. (b)

- Infrequent failure to notify NMSS, STP, NSIR, and others, as appropriate, of incidents. (c)

Unsatisfactory (3)

- Review indicates frequent examples of response to incidents or allegations to be incomplete, inappropriate, poorly coordinated, or not timely. As a result, potential health and safety problems persist. (a)

- Failure to notify NMSS, STP, NSIR, and others, as appropriate, of incidents. (b)

Common Performance Indicator 5—Technical Quality of Incident and Allegation Activities (E) (continued)

Category N (4)

This category is not applicable.

Non-Common Performance Indicator 1—Compatibility Requirements (F)

Satisfactory (1)

- State statutes authorize the State to establish a program for the regulation of agreement material and provide authority for the assumption of regulatory responsibility under the agreement. (a)

- The statutes authorize the State to promulgate regulatory requirements necessary to provide reasonable assurance of protection of public health and safety. (b)

- The State is authorized through its legal authority to license, inspect, and enforce legally binding requirements such as regulations and licenses. (c)

- State statutes are consistent with Federal statutes, as appropriate. (d)

- The State has existing legally enforceable measures, such as generally applicable rules, license provisions, or other appropriate measures, necessary to allow the State to ensure adequate protection of public health and safety in the regulation of agreement material. (e)

- The State has adopted legally binding requirements, regulations, and other program elements in accordance with Management Directive (MD) 5.9, "Adequacy and Compatibility of Agreement State Programs," and the current revisions of

Non-Common Performance Indicator 1— Compatibility Requirements (F) (continued)

Satisfactory (1) (continued)

STP Procedures SA-201, “Review of State Regulatory Requirements," and SA-200, "Compatibility Categories and Health and Safety Identification for NRC Regulations and Other Program Elements," with only minor discrepancies. (f)

- NRC regulations that should be adopted by an Agreement State for purposes of compatibility or health and safety are adopted in a time frame so that the effective date of the State requirement is not later than 3 years after the effective date of NRC's final rule. (g)

- Other program elements that have been designated as necessary for maintenance of an adequate and compatible program should be adopted and implemented by an Agreement State within 6 months of such designation by NRC. (h)

Satisfactory, But Needs Improvement (2)

- The State has adopted legally binding requirements, regulations, and other program elements in accordance with MD 5.9 and the current revisions of STP Procedures SA-201 and SA-200, but there are compatibility or health and safety discrepancies that need to be addressed. (a)

- Several NRC regulations that should be adopted by an Agreement State are adopted in a time frame such that the effective date of the State requirement is more than 3 years after the effective date of NRC's final rule. (b)

- Several program elements that have been designated as necessary for maintenance of an adequate and compatible program have been adopted and implemented by the Agreement State in a time frame greater than 6 months after such designation by NRC. (c)

Non-Common Performance Indicator 1— Compatibility Requirements (F) (continued)

Unsatisfactory (3)

- The State no longer has statutes that authorize it to establish a program for the regulation of agreement material and provide authority for the assumption of regulatory responsibility under the agreement. (a)

- The State is not authorized through its legal authority to license, inspect, or enforce legally binding requirements, such as regulations and licenses. (b)

- State statutes are in conflict with, or do not sufficiently reflect, the scope of Federal statutes. (c)

- The State does not have existing legally enforceable measures, such as generally applicable rules, license provisions, or other appropriate measures, necessary to allow the State to ensure adequate protection of public health and safety in the regulation of agreement material. (d)

- The State has not adopted significant legally binding requirements, regulations, and other program elements in accordance with MD 5.9 and the current revisions of STP Procedures SA-201 and SA-200. (e)

- Most NRC regulations that should be adopted by an Agreement State are consistently adopted in a time frame so that the effective date of the State requirement is significantly more (many months or years) than 3 years after the effective date of NRC's final rule. (f)

- Most program elements that have been designated "as necessary" for maintenance of an adequate and compatible program have been adopted and implemented by the Agreement States in a time frame significantly more (many months or years) than 6 months after such designation by NRC. (g)

Non-Common Performance Indicator 1—Compatibility Requirements (F) (continued)

Category N (4)

This category is not applicable.

Non-Common Performance Indicator 2—Sealed Source and Device Evaluation Program (G)

Technical Staffing and Training (1)

Satisfactory (a)

The technical reviews are performed by staff with proper training and qualifications. (i)

Qualification criteria for reviewers are established, implemented, and documented. (ii)

Satisfactory, But Needs Improvement (b)

Some reviewers do not have the proper qualifications and training.

Unsatisfactory (c)

Technical review of the reviewer's evaluation is either not performed or not performed by management or staff having proper qualifications and training.

Category N (d)

Special conditions exist that provide adequate justification for not conducting an evaluation and providing a rating for this subelement. For example, cases in which an Agreement State may have currently sealed source and device (SS&D) evaluation authority but is not performing any SS&D reviews. In such cases, the program should commit in writing to having an SS&D evaluation program in place (as described in Section (C)(2) of Part II) before performing evaluations.

Non-Common Performance Indicator 2—Sealed Source and Device Evaluation Program (G) (continued)

Technical Quality of the Product Evaluation Program (2)

Satisfactory (a)

- Review of a representative sample of SS&D evaluations completed during the review period indicates that product evaluations are thorough, complete, consistent, of acceptable technical quality, and adequately address the integrity of the products under normal conditions of use and likely accident conditions. (i)

- Health and safety issues are properly addressed. (ii)

- Registrations clearly summarize the product evaluation and provide license reviewers with adequate information in order to license possession and use of the product. (iii)

- Deficiency letters clearly state regulatory positions and are used at the proper time. (iv)

- A concurrence review of each application and proposed certificate of registration is performed by a second qualified reviewer or supervisor, and the record indicated that the second reviewer concurs on the finding that the product is acceptable for licensing purposes. (v)

- Applicable guidance documents are followed, unless approval to use alternate procedures is obtained from management. (vi)

- Completed registration certificates, and the status of obsolete registration certificates, are clear and are promptly transmitted to NRC, Agreement States, and others, as appropriate. (vii)

- Reviewers ensure that registrants have developed and implemented adequate quality assurance and control programs. (viii)

Non-Common Performance Indicator 2—Sealed Source and Device Evaluation Program (G) (continued)

Technical Quality of the Product Evaluation Program (2) (continued)

- There is a means for enforcing commitments made by registrants in their applications and referenced in the registration certificates by the program. (ix)

Satisfactory, But Needs Improvement (b)

- Review indicates that some SS&D evaluations do not fully address important health and safety concerns or indicates repeated examples of problems with respect to thoroughness, completeness, consistency, clarity, technical quality, adherence to existing guidance in product evaluations, and addressing the integrity of the products. (i)

- Not all registrations clearly summarize the product evaluation and not all provide license reviewers with adequate information in order to license possession and use of the product. (ii)

- Reviewers do not follow all appropriate guidance documents. (iii)

- The initial and concurrence reviews are not always performed by persons with adequate training. (iv)

- Completed registration certificates, and the status of obsolete registration certificates, are not always clear or are not always promptly transmitted to NRC, Agreement States, and others, as appropriate. (v)

- Not all product evaluations include an evaluation of proposed quality assurance and control programs. (vi)

Non-Common Performance Indicator 2—Sealed Source and Device Evaluation Program (G) (continued)

Technical Quality of the Product Evaluation Program (2) (continued)

- Commitments made by registrants in their applications, and referenced in the registration certificates, cannot be enforced for all registrations. (vii)

Unsatisfactory (c)

- Review indicates that SS&D evaluations frequently fail to address important health and safety concerns or indicates chronic problems with respect to thoroughness, completeness, consistency, clarity, technical quality, adherence to existing guidance in product evaluations, and adequately addressing the integrity of the products. (i)

- Registrations often do not clearly summarize the product evaluation and do not provide license reviewers with adequate information in order to license possession and use of the product. (ii)

- Reviewers often do not follow appropriate guidance documents. (iii)

- The initial and concurrence reviews are often not performed by persons with adequate training. (iv)

- Completed registration certificates, and the status of obsolete registration certificates, are unclear and are not promptly transmitted to NRC, Agreement States, and others, as appropriate. (v)

- Product evaluations often do not include an evaluation of proposed quality assurance and control programs. (vi)

Non-Common Performance Indicator 2—Sealed Source and Device Evaluation Program (G) (continued)

Technical Quality of the Product Evaluation Program (2) (continued)

- Commitments made by registrants in their applications, and referenced in the registration certificates, often cannot be enforced. (vii)

- The review has identified potentially significant health and safety issues linked to a specific product evaluation. (viii)

Category N (d)

Special conditions exist that provide adequate justification for not conducting an evaluation and providing a rating for this subelement. For example, cases in which an Agreement State currently may have SS&D evaluation authority but is not performing any SS&D reviews. In such cases, the program should commit in writing to having an SS&D evaluation program in place (as described in Section (C)(2) of Part II) before performing evaluations.

Evaluation of Defects and Incidents Regarding SS&Ds (3)

Satisfactory (a)

The SS&D evaluation program routinely evaluates the root causes of defects and incidents involving SS&D evaluations and takes appropriate actions, including modifications of SS&D sheets and notification of NRC, Agreement States, and others, as appropriate.

Satisfactory, But Needs Improvement (b)

The SS&D evaluation program does not fully evaluate the root causes of all defects and incidents involving SS&D evaluations, or when performed, the programs do not always take appropriate

Non-Common Performance Indicator 2—Sealed Source and Device Evaluation Program (G) (continued)

Evaluation of Defects and Incidents Regarding SS&Ds (3) (continued)

actions, including notification of NRC, Agreement States, and others, as appropriate.

Unsatisfactory (c)

The SS&D evaluation program does not ensure evaluation of the root causes of defects and incidents involving SS&D evaluations, or if performed, does not ensure appropriate actions are taken, including notification of NRC, Agreement States, and others, as appropriate.

Category N (d)

Special conditions exist that provide adequate justification for not conducting an evaluation and providing a rating for this subelement. For example, cases in which an Agreement State currently may have SS&D evaluation authority but is not performing any SS&D reviews. In such cases, the program should commit in writing to having an SS&D evaluation program in place (as described in Section (C)(2) of Part II) before performing evaluations.

Non-Common Performance Indicator 3—Low-Level Radioactive Waste Disposal Program (H)

Technical Staffing and Training (1)

Satisfactory (a)

- Review indicates that the qualifications of the technical staff are commensurate with expertise identified as necessary to regulate a low-level radioactive waste disposal facility. (i)

Non-Common Performance Indicator 3—Low-Level Radioactive Waste Disposal Program (H) (continued)

Technical Staffing and Training (1) (continued)

- The management has developed and implemented a training program for staff. (ii)

- Staffing trends that could have an adverse impact on the quality of the program are tracked, analyzed, and addressed. (iii)

Satisfactory, But Needs Improvement (b)

- There is some staff turnover that could adversely impact the low-level radioactive waste disposal program. (i)

- Some vacant positions are not readily filled. (ii)

- There is some evidence of lack of management attention or action to deal with staffing problems. (iii)

- Some of the licensing and inspection personnel in the low-level radioactive waste disposal program are not making prompt progress in completing all of the training and qualification requirements. (iv)

- The training and qualification standards include areas that could be improved. (v)

- Some of the new staff is hired with little education or experience in physical and/or life sciences; materials licensing and inspection; civil or mechanical engineering; geology, hydrology, and other earth sciences; and environmental science. (vi)

Non-Common Performance Indicator 3—Low-Level Radioactive Waste Disposal Program (H) (continued)

Technical Staffing and Training (1) (continued)

Unsatisfactory (c)

- There is significant staff turnover relative to the size of the program. (i)
- Most vacant positions are not filled for extended periods. (ii)
- There is little evidence of management attention or actions to deal with staffing problems. (iii)
- Most of the licensing and inspection personnel are not making prompt progress in completing all of the training and qualification requirements. (iv)
- New staff members are hired without having education or experience in physical and/or life sciences; materials licensing and inspection; civil or mechanical engineering; geology, hydrology, and other earth sciences; and environmental science. (v)

Category N (d)

Special conditions exist that provide adequate justification for not conducting an evaluation and providing a rating for this subelement. For example, NRC has not required Agreement States to have a program for licensing a low-level radioactive disposal facility until such time as the State has been designated as a host State for such a facility. When an Agreement State has been notified or becomes aware of the need to regulate a low-level radioactive disposal facility, it is expected to put in place a regulatory program as described in Section (C)(3) of Part II.

Non-Common Performance Indicator 3—Low-Level Radioactive Waste Disposal Program (H) (continued)

Status of Low-Level Radioactive Waste Disposal Inspection (2)

Satisfactory (a)

- Low-level radioactive waste disposal licensees are inspected at regular intervals in accordance with frequencies prescribed in NRC Inspection Manual, Chapter 2800. (i)

- Deviations from these schedules are normally coordinated between working staff and management. (ii)

- The inspection findings are communicated to licensees in a timely manner (30 calendar days as specified in NRC Inspection Manual, Chapter 0610). (iii)

- All nonoperational phase inspections are conducted at the State's prescribed frequency. (iv)

Satisfactory, But Needs Improvement (b)

- The licensee is inspected at intervals that exceed the NRC Inspection Manual, Chapter 2800, frequency by more than 25 percent. (i)

- All nonoperational phase inspections are conducted at intervals that exceed the State frequencies by more than 25 percent. (ii)

- Some of the inspection findings are delayed or are not communicated to licensees within 30 days. (iii)

Non-Common Performance Indicator 3—Low-Level Radioactive Waste Disposal Program (H) (continued)

Status of Low-Level Radioactive Waste Disposal Inspection (2) (continued)

Unsatisfactory (c)

- The licensee is inspected at intervals that exceed the NRC Inspection Manual, Chapter 2800, frequency by more than 100 percent. (i)

- Nonoperational phase inspections are conducted at intervals that exceed the State frequencies by more than 100 percent. (ii)

- Most inspection findings are frequently delayed. (iii)

Category N (d)

Special conditions exist that provide adequate justification for not conducting an evaluation and providing a rating for this subelement. For example, NRC has not required Agreement States to have a program for licensing a low-level radioactive disposal facility until such time as the State has been designated as a host State for such a facility. When an Agreement State has been notified or becomes aware of the need to regulate a low-level radioactive disposal facility, it is expected to put in place a regulatory program as described in Section (C)(3) of Part II.

Technical Quality of Inspections (3)

Satisfactory (a)

- Review team members accompanying inspectors combined with an onsite review of completed inspection files indicate inspection findings are usually well founded and well documented throughout the assessment period. (i)

Non-Common Performance Indicator 3—Low-Level Radioactive Waste Disposal Program (H) (continued)

Technical Quality of Inspections (3) (continued)

- A review of inspector field notes or completed reports, as appropriate, indicates that most inspections are complete and reviewed promptly by supervisors or management. (ii)

- Procedures are in place and normally used to help identify root causes and poor licensee performance. (iii)

- In most instances, followup inspections address previously identified open items and/or past violations. (iv)

- Inspection findings generally lead to appropriate and prompt regulatory action. (v)

- Supervisors accompany nearly all inspectors on an annual basis. (vi)

Satisfactory, But Needs Improvement (b)

- Review indicates that low-level radioactive waste disposal inspections do not fully address potentially important health and safety concerns or it indicates periodic problems with respect to completeness, adherence to procedures, management review, thoroughness, technical quality, and consistency. (i)

- Review indicates that findings in inspection reports and inspection files are, on occasion, not well founded or well documented. (ii)

- The review does not demonstrate an appropriate level of management review. (iii)

Non-Common Performance Indicator 3—Low-Level Radioactive Waste Disposal Program (H) (continued)

Technical Quality of Inspections (3) (continued)

- Accompaniments of inspectors by supervisors are performed nonsystematically. (iv)

- Followup actions to inspection findings are often not timely. (v)

Unsatisfactory (c)

- Review indicates that inspections (including construction phase and closure/monitoring phase) frequently fail to address potentially important health and safety concerns or it indicates chronic problems exist with respect to completeness, adherence to procedures, management review, thoroughness, technical quality, and consistency. (i)

- Accompaniments of inspectors are infrequently performed. (ii)

- Followup actions to inspection findings are often not timely and appropriate. (iii)

Category N (d)

Special conditions exist that provide adequate justification for not conducting an evaluation and providing a rating for this subelement. For example, NRC has not required Agreement States to have a program for licensing a low-level radioactive disposal facility until such time as the State has been designated as a host State for such a facility. When an Agreement State has been notified or becomes aware of the need to regulate a low-level radioactive disposal facility, it is expected to put in place a regulatory program as described in Section (C)(3) of Part II.

Non-Common Performance Indicator 3—Low-Level Radioactive Waste Disposal Program (H) (continued)

Technical Quality of Licensing Actions (4)

Satisfactory (a)

- Prelicensing interactions with the applicant are occurring on a regular basis. (i)
- Special license tie-down conditions are usually stated clearly and are inspectable. (ii)
- Deficiency letters clearly state regulatory positions and are used at the proper time. (iii)
- Reviews of amendments and renewal applications demonstrate thorough analysis of a licensee's inspection and enforcement history, if applicable. (iv)
- Applicable guidance documents are available to reviewers in most cases and are generally followed. (v)
- Public hearings in accordance with the State administrative laws have occurred. (vi)
- Review of certain technical aspects of the low-level radioactive waste license files indicates that aspect of the license review is generally thorough, complete, consistent, and of acceptable technical quality. (vii)
- Health and safety issues are properly addressed. (viii)
- An evaluation of the license review process indicates that the process is thorough and consistent. (ix)

Non-Common Performance Indicator 3—Low-Level Radioactive Waste Disposal Program (H) (continued)

Technical Quality of Licensing Actions (4) (continued)

Satisfactory, But Needs Improvement (b)

- Review indicates that some technical aspects of licensing do not fully address health and safety concerns or indicates problems with respect to thoroughness, completeness, consistency, clarity, technical quality, and adherence to existing guidance in licensing actions. (i)

- Some aspects of the public hearings are not consistent with State administrative law or do not address some aspects of the licensing of a low-level radioactive waste disposal facility. (ii)

Unsatisfactory (c)

- Review indicates that technical aspects of the licensing actions frequently fail to address important health and safety concerns or indicates chronic problems with respect to thoroughness, completeness, consistency, clarity, technical quality, and adherence to existing guidance in licensing actions. (i)

- Public hearings are not consistent with State administrative law or fail to address aspects of the licensing of a low-level radioactive waste disposal facility. (ii)

Category N (d)

Special conditions exist that provide adequate justification for not conducting an evaluation and providing a rating for this subelement. For example, NRC has not required Agreement States to have a program for licensing a low-level radioactive disposal facility until such time as the State has been designated as a host State for such a facility. When an Agreement State has been notified or becomes aware of the need to regulate a low-level

Non-Common Performance Indicator 3—Low-Level Radioactive Waste Disposal Program (H) (continued)

Technical Quality of Licensing Actions (4) (continued)

radioactive disposal facility, it is expected to put in place a regulatory program as described in Section (C)(3) of Part II.

Technical Quality of Incident and Allegation Activities (5)

Satisfactory (a)

Meets "Satisfactory" performance for common performance indicator criteria, Section (E)(1) of this part, as applied to the technical quality of incident and allegation activities subelement for the low-level radioactive waste disposal program.

Satisfactory, But Needs Improvement (b)

Meets "Satisfactory, But Needs Improvement" performance for common performance indicator criteria, Section (E)(2) of this part, as applied to the technical quality of incident and allegation activities subelement for the low-level radioactive waste disposal program.

Unsatisfactory (c)

Meets "Unsatisfactory" performance for common performance indicator criteria, Section (E)(3) of this part, as applied to the technical quality of incident and allegation activities subelement for the low-level radioactive waste disposal program.

Category N (d)

Special conditions exist that provide adequate justification for not conducting an evaluation and providing a rating for this subelement. For example, NRC has not required Agreement States to have a program for licensing a low-level radioactive disposal facility until such time as the State has been designated

Non-Common Performance Indicator 3—Low-Level Radioactive Waste Disposal Program (H) (continued)

Technical Quality of Incident and Allegation Activities (5) (continued)

as a host State for such a facility. When an Agreement State has been notified or becomes aware of the need to regulate a low-level radioactive disposal facility, it is expected to put in place a regulatory program as described in Section (C)(3) of Part II.

Non-Common Performance Indicator 4—Uranium Recovery Program (I)

Technical Staffing and Training (1)

Satisfactory (a)

- Review indicates that the qualifications of the technical staff are commensurate with expertise identified as necessary to regulate uranium recovery facilities. (i)

- The management has developed and implemented a training program for staff. (ii)

- Staffing trends that could have an adverse impact on the quality of the program are tracked, analyzed, and addressed. (iii)

Satisfactory, But Needs Improvement (b)

- There is some staff turnover, which adversely impacts the uranium recovery program. (i)

- Some vacant positions, necessary for continued program effectiveness, are not readily filled. (ii)

- There is some evidence of lack of management attention or action to deal with staffing problems. (iii)

Non-Common Performance Indicator 4—Uranium Recovery Program (I) (continued)

Technical Staffing and Training (1) (continued)

- Some of the uranium recovery licensing and inspection personnel are not making prompt progress in completing all of the training and qualification requirements. (iv)

- The training and qualification standards include areas that could be improved. (v)

- Some of the new staff are hired with little education or experience in physical and/or life sciences; materials licensing and inspection; civil or mechanical engineering; geology, hydrology, and other earth sciences; and environmental science. (vi)

Unsatisfactory (c)

- There is significant staff turnover relative to the size of the program. (i)

- Most vacant positions are not filled for extended periods. (ii)

- There is little evidence of management attention or action to deal with staffing problems. (iii)

- Training program is not in place. (iv)

- Most of the licensing and inspection personnel are not making prompt progress in completing all of the training and qualification requirements. (v)

- New staff members are hired without having education or experience in physical and/or life sciences; materials licensing and inspection; civil or mechanical engineering; geology, hydrology, and other earth sciences; and environmental science. (vi)

Non-Common Performance Indicator 4—Uranium Recovery Program (I) (continued)

Technical Staffing and Training (1) (continued)

Category N (d)

This category is not applicable.

Status of Uranium Recovery Inspection Program (2)

Satisfactory (a)

- Uranium recovery licensees are inspected at regular intervals in accordance with frequencies prescribed in NRC Inspection Manual, Chapters 2801 and 2600. (i)

- Deviations are generally the result of decisions that consider the risk of licensee operation, past licensee performance, and the need to temporarily defer the inspection(s) to address more urgent or more critical priorities. (ii)

- There is a plan to reschedule any missed or deferred inspections or a basis established for not rescheduling. (iii)

- Inspection findings are communicated to licensees at the exit briefings and confirmed formally in writing in a timely manner (30 calendar days as specified in NRC Inspection Manual, Chapter 0610). (iv)

Satisfactory, But Needs Improvement (b)

- The licensees are inspected at intervals that exceed the NRC Inspection Manual, Chapter 2801, frequencies for conventional uranium mills or the NRC Inspection Manual, Chapter 2600, frequencies for in situ leach facilities by more than 25 percent. (i)

Non-Common Performance Indicator 4—Uranium Recovery Program (I) (continued)

Status of Uranium Recovery Inspection Program (2) (continued)

- Some of the inspection findings are delayed or not communicated to licensees within 30 days. (ii)

Unsatisfactory (c)

- The licensees are inspected at intervals that exceed the NRC Inspection Manual, Chapter 2801, frequencies for conventional uranium mills or NRC Inspection Manual, Chapter 2600, frequencies for in situ leach facilities by more than 100 percent. (i)

- Inspection findings are frequently delayed. (ii)

Category N (d)

This category is not applicable.

Technical Quality of Inspections (3)

Satisfactory (a)

- Review team members accompanying inspectors combined with an onsite review of a representative cross-section of completed inspection files indicates inspection findings are usually well founded and well documented throughout the assessment period. (i)

- Licensing history and status are incorporated into the inspection program as demonstrated through accompaniments and procedures in place. (ii)

Non-Common Performance Indicator 4—Uranium Recovery Program (I) (continued)

Technical Quality of Inspections (3) (continued)

- A review of inspector field notes or completed reports indicates that most inspections are complete and reviewed promptly by supervisors or management. (iii)

- Procedures are in place and normally used to help identify root causes and poor licensee performance. (iv)

- In most instances, followup inspections address previously identified open items and/or past violations. (v)

- Inspection findings generally lead to appropriate and prompt regulatory action. (vi)

- Supervisors accompany nearly all inspectors on an annual basis. (vii)

Satisfactory, But Needs Improvement (b)

- Review indicates that uranium recovery inspections occasionally do not address potentially important health, safety, and environmental concerns or it indicates periodic problems with respect to completeness, adherence to procedures, management review, thoroughness, technical quality, and consistency. (i)

- Review indicates that findings in inspection reports and inspection files are, on occasion, not well founded or well documented, and the review does not demonstrate an appropriate level of management review. (ii)

- Accompaniment of inspectors by supervisors is performed nonsystematically. (iii)

Non-Common Performance Indicator 4—Uranium Recovery Program (I) (continued)

Technical Quality of Inspections (3) (continued)

- Followup actions to inspection findings are often not timely. (iv)

Unsatisfactory (c)

- Review indicates that uranium recovery inspections frequently fail to address potentially important health, safety, and environmental concerns or it indicates chronic problems exist with respect to completeness, adherence to procedures, management review, thoroughness, technical quality, and consistency. (i)

- Accompaniments of inspectors are infrequently performed. (ii)

- Followup actions to inspection findings are often not timely and appropriate. (iii)

Category N (d)

This category is not applicable.

Technical Quality of Licensing Actions (4)

Satisfactory (a)

- Review of completed licenses and a representative sample of licensing files indicates that license reviews are generally thorough, complete, consistent, and of acceptable technical quality. (i)

- Health, safety, and environmental issues are properly addressed. (ii)

- License reviewers almost always have the proper signature authority for the cases they review. (iii)

Non-Common Performance Indicator 4—Uranium Recovery Program (I) (continued)

Technical Quality of Licensing Actions (4) (continued)

- Special license tie-down conditions are usually stated clearly and are inspectable. (iv)

- Deficiency letters clearly state regulatory positions and are used at the proper time. (v)

- Reviews of renewal applications demonstrate thorough analysis of a licensee's inspection and enforcement history. (vi)

- Applicable guidance documents are available to reviewers in most cases and are generally followed. (vii)

Satisfactory, But Needs Improvement (b)

Review indicates that some licensing actions do not fully address health, safety, and environmental concerns or indicates repeated examples of problems with respect to thoroughness, completeness, consistency, clarity, technical quality, and adherence to existing guidance in licensing actions.

Unsatisfactory (c)

Review indicates that licensing actions frequently fail to address important health, safety, and environmental concerns or indicates chronic problems with respect to thoroughness, completeness, consistency, clarity, technical quality, and adherence to existing guidance in licensing actions.

Category N (d)

This category is not applicable.

Non-Common Performance Indicator 4—Uranium Recovery Program (I) (continued)

Technical Quality of Incident and Allegation Activities (5)

Satisfactory (a)

Meets "Satisfactory" performance for common performance indicator criteria, Section (E)(1) of this part, as applied to the technical quality of incident and allegation activities subelement for the uranium recovery program.

Satisfactory, But Needs Improvement (b)

Meets "Satisfactory, But Needs Improvement" performance for common performance indicator criteria, Section (E)(2) of this part, as applied to the technical quality of incident and allegation activities subelement for the uranium recovery program.

Unsatisfactory (c)

Meets "Unsatisfactory" performance for common performance indicator criteria, Section (E)(3) of this part, as applied to the technical quality of incident and allegation activities subelement for the uranium recovery program.

Category N (d)

This category is not applicable.

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (J)

Technical Staffing and Training (1)

Satisfactory (a)

Review indicates implementation of a well-conceived and balanced staffing strategy throughout the assessment period and

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (J) (continued)

Technical Staffing and Training (1) (continued)

demonstrates the qualifications of the technical staff. This balanced staffing strategy is indicated by the presence of most of the following features:

- Prompt management attention and review to recognize staffing or training problems (e.g., high rates of attrition, positions being vacant for extended periods, lack of adequate training opportunities) and to develop appropriate corrective action plans. (i)

- Qualification criteria for hiring new technical staff have been established and are being followed. Staff would normally be expected to have bachelor's degrees or equivalent training in the physical and/or life sciences. Senior personnel should have additional training and experience beyond their original area of specialization to reflect the broader area of responsibility in their organization. (ii)

- Inspectors are trained and qualified in a reasonable time period, despite difficulties that may be encountered in the availability of training opportunities provided by NRC, or of alternative outside training opportunities determined by the Division of Fuel Cycle Safety and Safeguards (FCSS), NMSS, to meet requirements specified in NRC Inspection Manual, Chapter 1246. This means there has been, and continues to be, a clear effort to adhere to the requirements and conditions specified in NRC Inspection Manual, Chapter 1246, and the applicable qualifications journals, or to receive equivalent training elsewhere. Training plans and schedules for qualification are established, maintained, and personally reviewed by the inspector and management. (iii)

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (J) (continued)

Technical Staffing and Training (1) (continued)

- Management ensures that inspectors avail themselves of opportunities for required training infrequently provided by NRC, or identifies to FCSS alternative outside training opportunities that can be determined by FCSS to meet NRC Inspection Manual, Chapter 1246, requirements, resulting in trainees reaching qualification without undue delays. (iv)

- Management commitment to training is clearly evident. (v)

- Inspectors are provided cross-training opportunities to develop skills necessary to substitute for or assist other inspectors in functional areas outside their normal assignments. (vi)

- Inspectors are current with regard to required retraining and refresher training. (vii)

- Records are kept to track how training requirements are satisfied for those requiring training, to provide reminders of when refresher training is due, and to provide reliable and accurate statistics on the status of the training program. (viii)

Satisfactory, But Needs Improvement (b)

- Some unanticipated staff turnover has occurred that could adversely affect the ability of remaining staff to conduct the inspection program, and management has not taken immediate steps to adjust inspection planning accordingly, or begin the process of replacement. (i)

- Some vacant positions have not been readily filled. (ii)

- Some evidence of management attention or actions to deal with staffing problems that may have arisen, but a problem still persists. (iii)

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (J) (continued)

Technical Staffing and Training (1) (continued)

- Some of the inspection personnel are not making reasonable progress in completing the training (or retraining) and qualification requirements, despite allowing for difficulties in arranging for NRC Inspection Manual, Chapter 1246, required courses infrequently provided by NRC. (iv)

- Management permits several instances to occur in which inspectors do not avail themselves of opportunities for required training infrequently provided by NRC, resulting in extensions of the time needed for trainees to become qualified. (v)

- The region's training and qualification standards do not completely correspond to functional requirements for inspections. (vi)

- Minor difficulties arise when attempting to accurately determine the status of training, retraining, and refresher training requirements and accomplishments for those requiring such training. (vii)

- Some of those requiring retraining or refresher training are not current. There is an effort to track and schedule the required training, but there is no documentation to explain why the necessary training has not been provided. (viii)

Unsatisfactory (c)

Review determines the presence of chronic or acute problems related to some of the following conditions, which cause concerns about their likely impacts on other subelements of this performance indicator:

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (J) (continued)

Technical Staffing and Training (1) (continued)

- Significant unanticipated staff turnover relative to the size of the program, the causes of which cannot all be attributed to normal attrition. (i)

- Many vacant positions remain unfilled for extended periods. (ii)

- Little evidence is exhibited of management attention or actions to deal with staffing problems found to exist. (iii)

- Many of the inspection personnel have not met their schedules for qualification, or met refresher training requirements, falling short of written plans and schedules to do so. (iv)

- Some opportunities for taking NRC Inspection Manual, Chapter 1246, required training courses infrequently provided by NRC, or alternative outside training opportunities identified by FCSS as meeting such requirements were not attended by inspectors needing such courses for qualification, contributing to failure of inspector trainees to meet established schedules for qualification. (v)

- New staff members are hired without having adequate scientific or technical backgrounds. (vi)

- Management is unable to determine within a reasonable time the status of training, retraining, and refresher training for those requiring such training. (vii)

- Inadequate or no tracking or scheduling for those requiring retraining or refresher training. (viii)

- Newly hired inspector trainees are not provided sufficient onsite training experience, or they are not provided proper

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (J) (continued)

Technical Staffing and Training (1) (continued)

guidance by inspection leaders or supervisors while directly contributing to inspections. (ix)

- Management consistently withdraws inspection personnel from required training activities to participate in other activities, with the result that established schedules for qualification of inspection personnel are not met. (x)

Category N (d)

Special conditions exist that provide justification for withholding a rating. For example, there has been a substantial management effort to deal with staffing problems, or the mission of the organization has changed too rapidly for training programs to adjust. NMSS has been kept informed of the situation, and discernable recent progress is evident.

Status of Fuel Cycle Inspection Program (2)

Satisfactory (a)

- Licensees are inspected at regular intervals in accordance with frequencies prescribed in NRC Inspection Manual, Chapter 2600, with appropriate documented adjustments to reflect licensee performance and the inherent risk of licensee operations. (i)

  – The schedules for facility inspections are appropriately updated and maintained in the fuel cycle master inspection plan. (*a*)

  – The inspections scheduled for each facility are consistent with the requirements of NRC Inspection Manual, Chapter 2600, with appropriate adjustments. (*b*)

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (J) (continued)

Status of Fuel Cycle Inspection Program (2) (continued)

– There are few differences between the inspections planned and scheduled for the current fiscal year and the inspection program currently intended for each facility for the fiscal year. (*c*)

– Changes in the fuel cycle master inspection plan are documented when they occur and generally are the result of joint decisions between management and staff in the regions and headquarters. (*d*)

– Changes in the region's inspection program for each facility are well documented and primarily based on the inherent risks of licensee operation, past licensee performance, and the need to address more urgent or more critical priorities or deal with unforeseen resource limitations. (*e*)

- There is evidence that regional management periodically ascertains the status of the inspection program and, when necessary, acts swiftly to resolve problems affecting performance. Management is confident that the existing inspection schedule adequately reflects the region's stated objectives for each facility's inspection program. Management also is aware of the comparison between planned inspections and actual performance of inspections, and is confident that the objectives for each facility's inspection program are being met. (ii)

- There is clear evidence of an ongoing process to reschedule any missed or deferred inspections and to optimize the ability to meet the stated objectives. (iii)

- The scheduling and performance of inspections optimize the utilization of inspection resources so that inspectors are

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (J) (continued)

Status of Fuel Cycle Inspection Program (2) (continued)

permitted sufficient time to prepare for and document inspections. The percentage of time inspectors spend on routine inspections, reactive inspections, preparation and documentation, and other programmatic activities is close to that originally planned in accordance with stated objectives. Significant departures from what was originally planned, and the reasons for their occurrence, are documented as they become apparent. (iv)

- Inspection findings are communicated to licensees in a timely manner (normally within 30 calendar days, or 45 days for team inspections, as specified in NRC Inspection Manual, Chapter 0610, unless there are legitimate documented reasons for delays). (v)

- The region adequately maintains documentation of licensee performance in support of the licensee performance review program. (vi)

Satisfactory, But Needs Improvement (b)

- Licensees are inspected at greater intervals than specified in NRC Inspection Manual, Chapter 2600, absent timely written documentation of the intention to do so. (i)

  – Objectives for the inspection of some of the region's facilities are not documented in an inspection plan for each facility, or they are not in sufficient detail to adequately express the inspection requirements for each facility in terms of licensee performance or inherent facility risk. (*a*)

  – The inspections scheduled in the fuel cycle master inspection plan for a facility do not correspond to the objectives previously documented for the facility's

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (J) (continued)

Status of Fuel Cycle Inspection Program (2) (continued)

inspection program, and the reasons for the discrepancies have not been documented adequately. (*b*)

– The inspections scheduled in the fuel cycle master inspection plan for one or more facilities do not reflect the requirements contained in NRC Inspection Manual, Chapter 2600, and no timely documentation exists to justify the discrepancies. (*c*)

- Reliable documentation regarding the conduct of the region's inspection program cannot be readily produced, and the region cannot confirm within a reasonable time that the inspection program meets the requirements of NRC Inspection Manual, Chapter 2600, or the objectives previously documented for each facility's inspection program. (ii)

- Regional management is slow to react to problems affecting performance of planned inspections, with the result that the inspections contained in the fuel cycle master inspection program no longer correspond to the inspection direction needed to focus on changes in licensee performance. (iii)

- Some inspectors are underutilized or overutilized for routine inspections to the extent that their onsite inspection hours do not correspond to the region's stated objectives for utilization of inspection resources, with no adequate documentation to justify the discrepancies. (iv)

- Some of the inspection findings are delayed, or not communicated to licensees within 30 days (45 days for team inspections), without adequate documentation of justification or legitimate reasons for such delays or deletions (as in the case of pending escalated enforcement). (v)

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (J) (continued)

Status of Fuel Cycle Inspection Program (2) (continued)

- Documentation in support of the observations required to be formulated for the licensee performance review program does not exist or is not easily located. (vi)

Unsatisfactory (c)

- Licensees are inspected at intervals that frequently exceed the NRC Inspection Manual, Chapter 2600, frequencies, irrespective of licensee performance or facility risk, without adequate documentation or justification for such departures. (i)

- Objectives for each facility's inspection program have not been documented or do not adequately consider NRC Inspection Manual, Chapter 2600, requirements, licensee performance, or the inherent risk of licensee operations. (ii)

- Management cannot readily demonstrate that the existing regional fuel cycle inspection schedule, in combination with the recent history of completed inspections, support the inspection objectives described in the inspection programs for each facility. (iii)

- Inspections of licensees or communications of the inspection findings are frequently delayed, without adequate documentation or justification. (iv)

- The region does not adequately maintain documentation necessary to document licensee performance in support of the licensee performance review program. (v)

- Observations provided to support the licensee performance review program cannot be supported by existing documentation. (vi)

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (J) (continued)

Status of Fuel Cycle Inspection Program (2) (continued)

Category N (d)

Special conditions exist that provide adequate justification for withholding a rating. For example, an unforeseen event or emergency with significant health and safety consequences may have required a temporary diversion of resources from the core inspection program. However, these programmatic adjustments are well founded and properly coordinated with NMSS management.

Technical Quality of Inspections (3)

Satisfactory (a)

- An onsite review of a representative cross-section of completed inspection files indicates inspection findings are usually well founded and well documented throughout the assessment period. (i)

- A review of completed inspection reports indicates that most inspections are complete, consistent with the requirements of NRC Inspection Manual, Chapter 0610, and reviewed promptly by supervisors or management. (ii)

- Inspection efforts focus on the safety or safeguards significance of licensee performance, while maintaining alertness to possible trends and patterns of poor licensee performance. Plant operations addressed and performance areas emphasized correspond closely to the objectives documented for the region's inspection program for the facility. (iii)

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (J) (continued)

Technical Quality of Inspections (3) (continued)

- In most instances, followup inspections address previously identified open items and/or past violations. (iv)

- Inspection findings generally lead to prompt and appropriate regulatory action. (v)

- All inspections are conducted or led by qualified NRC inspectors. Contractors and inspector trainees augmenting inspections are provided proper guidance by the inspection leader during onsite inspections, resulting in good integration of the efforts of these personnel with those of the other qualified inspectors. (vi)

- Supervisors accompany all inspectors on at least an annual basis, with greater emphasis on the less experienced inspectors. (vii)

Satisfactory, But Needs Improvement (b)

- Review indicates that findings in inspection reports and inspection files are, on occasion, not well founded or well documented, or the review demonstrates an inappropriate level of management review. (i)

- Review indicates that some inspections do not address potentially important health and safety concerns or indicates recurring problems with respect to completeness, adherence to procedures, management review, thoroughness, technical quality, or consistency relative to the requirements specified in NRC Inspection Manual, Chapter 0610. (ii)

- Inspection efforts do not always focus on the safety or safeguards significance of licensee performance. Inspection

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (J) (continued)

Technical Quality of Inspections (3) (continued)

reports do not attempt to address possible trends or patterns of poor licensee performance. Plant operations addressed and performance areas emphasized do not always correspond closely to the objectives documented in the region's inspection program for the facility. (iii)

- An instance occurs in which a contractor or an inspector trainee augmenting an inspection is not provided proper guidance by the inspection leader during an onsite inspection, resulting in inappropriate activity by the contractor that is not immediately corrected when discovered. (iv)

- Supervisors do not systematically accompany all inspectors to ensure at least annual frequency, but the more recently hired, inexperienced inspectors are accompanied at least annually. (v)

- Followup actions to inspection findings often are not timely, or not appropriate. (vi)

Unsatisfactory (c)

- Review indicates that inspections frequently fail to address potentially important health and safety concerns or indicates that chronic problems exist with respect to completeness, adherence to procedures, management review, thoroughness, technical quality, and consistency relative to the requirements specified in NRC Inspection Manual, Chapter 0610. (i)

- Inspection efforts typically do not focus on the safety or safeguards significance of licensee performance. Inspection reports do not attempt to address possible trends or patterns of poor licensee performance. Plant operations addressed and

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (J) (continued)

Technical Quality of Inspections (3) (continued)

performance areas of emphasis typically bear little correspondence to the objectives documented in the region's inspection program for the facility, or such documentation does not exist. (ii)

- More than one instance occurs in which a contractor augmenting an inspection is not provided proper guidance by the inspection leader during an onsite inspection, resulting in inappropriate activity by the contractor that is not immediately corrected when discovered. (iii)

- An inspection is conducted solely by an individual who is not a qualified NRC inspector, or is led by an individual who is not a qualified NRC inspector. (iv)

- Supervisors infrequently accompany inspectors, and accompaniments that are performed fail to involve the more recently hired, less experienced inspectors. (v)

- Followup actions to inspection findings are often not timely or appropriate. (vi)

Category N (d)

This category is not applicable.

Technical Quality of Incident and Allegation Activities (4)

Satisfactory (a)

- Incident response and allegation procedures are in place. (i)

- Incident response and allegation procedures are appropriately followed in nearly all cases. Actions taken are well coordinated

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (J) (continued)

Technical Quality of Incident and Allegation Activities (4) (continued)

with headquarters, as appropriate, and timely in most instances. The level of effort investigating incidents is usually commensurate with potential health and safety significance of the incident. (ii)

- Corrective (enforcement or other) actions are adequately identified to licensees promptly, and appropriate followup measures are taken, in coordination with headquarters, as appropriate, to ensure prompt compliance and protection of public health and safety. (iii)

- Followup inspections are scheduled, if necessary, and completed within a reasonable time. Notifications to NMSS, NSIR, and others, as appropriate, are usually provided in a timely fashion. (iv)

- Preparations for the region's portion of the response to major incidents are appropriate to the types of incidents that may occur at the region's facilities. Sufficient documentation exists to identify individuals with required skills and experience to be summoned to respond in an emergency, and potential regional participants have been trained to respond to worst case scenario incidents. (v)

- Procedures are in place to periodically check for completeness of materials needed for emergency response and to occasionally update these materials when circumstances change (e.g., staff turnover, completion of training requirements by staff who would respond, change in processes conducted at facilities, or addition or deletion of a facility). (vi)

- The region's portion of self-assessment activities following a drill or an actual event are comprehensive in recognizing

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (J) (continued)

Technical Quality of Incident and Allegation Activities (4) (continued)

problems that arose during the subject activity. Recommendations for improvement arising in self-assessment studies are tracked to ensure further study or implementation. (vii)

- Inspection activity conducted as followup to receipt of allegations is technically sound and successful in determining the safety implications of the allegations, as appropriate. (viii)

Satisfactory, But Needs Improvement (b)

- The regional portions of incident response and allegation procedures are in place but occasionally are not adhered to in detail. (i)

- Resolution of potential public health and safety issues is marginal, with problems in coordination or timeliness. (ii)

- Preparations for the regional portions of emergency response lag behind changes in circumstances (as described above). Some lapses in training, background, or experience needed to deal with identified types of incidents requiring response, or some types of incidents have been analyzed at the region's facilities but are not recognized in the region's portion of emergency response plans. (iii)

- The region's portion of self-assessment activities following a drill or an actual event are shallow in some areas in not recognizing or further analyzing problems that arose during the subject activity. Some recommendations for improvement in self-assessment studies are not tracked to ensure further study or implementation. (iv)

Non-Common Performance Indicator 5—Regional Fuel Cycle Inspection Program (J) (continued)

Technical Quality of Incident and Allegation Activities (4) (continued)

- The regional portion of inspection activity conducted as followup to receipt of allegations fails to completely address the safety implications of the allegations. (v)

Unsatisfactory (c)

- Review indicates frequent examples of the regional portion of response to incidents or allegations to be incomplete, inappropriate, poorly coordinated, or not timely. As a result, the identified potential health and safety problems persist. (i)

- Through regional direction, excessive effort is allocated to the investigation of relatively minor safety issues to the detriment of addressing more significant ones. (ii)

- The region has failed to adequately prepare for significant incidents that could occur at its facilities, despite existing documentation or analyses that indicate those incidents could occur. (iii)

- Inspection activity is not conducted as a followup to receipt of an allegation, though there was a clear need to investigate the safety implications of the allegations. (iv)

Category N (d)

This category is not applicable.

Non-Common Performance Indicator 6—Site Decommissioning Management Plan (SDMP) (K)

Staff Qualifications (1)

Satisfactory (a)

- Qualifications for license reviewers and inspectors are established and reviewed annually. (i)

- Nearly all staff members are qualified to perform licensing reviews and inspections related to decommissioning through training and documented work experience. (ii)

- Nonqualified staff are subject to the direct supervision of qualified managers; this supervision is evidenced by concurrence on inspection reports and licensing documentation. (iii)

Satisfactory, But Needs Improvement (b)

- Qualifications for license reviewers and inspectors are established and reviewed every 2 to 3 years. (i)

- Most staff members are qualified to perform licensing reviews and inspections related to decommissioning through training and documented work experience. (ii)

- Nonqualified staff are usually subject to the direct supervision of qualified managers; this supervision is evidenced by concurrence on inspection reports and licensing documentation. (iii)

Unsatisfactory (c)

- Qualifications for license reviewers and inspectors are not established, or if established, these qualifications are not reviewed. (i)

Non-Common Performance Indicator 6—Site Decommissioning Management Plan (SDMP) (K) (continued)

Staff Qualifications (1) (continued)

- The majority of staff is not qualified to perform licensing reviews and inspections related to decommissioning through training and documented work experience. (ii)

- Nonqualified staff are not typically subject to direct supervision of qualified managers. (iii)

Category N (d)

Special conditions exist that provide justification for withholding a rating for one or more of the evaluation criteria.

Quality of SDMP Decommissioning Reviews (2)

Satisfactory (a)

Nearly all decommissioning plans are reviewed and the reviews are documented in accordance with NRC Inspection Manual, Chapter 2605.

Satisfactory, But Needs Improvement (b)

Most decommissioning plans are reviewed and the reviews are documented in accordance with NRC Inspection Manual, Chapter 2605.

Unsatisfactory (c)

Decommissioning plans are not being consistently reviewed or documented in accordance with NRC Inspection Manual, Chapter 2605.

Non-Common Performance Indicator 6—Site Decommissioning Management Plan (SDMP) (K) (continued)

Quality of SDMP Decommissioning Reviews (2) (continued)

Category N (d)

Special conditions exist that provide justification for withholding a rating for one or more evaluation criteria.

Financial Assurance for Decommissioning (3)

Satisfactory (a)

- For nearly all sites, financial assurance is provided for the estimated costs for an independent third party to perform decommissioning with the objective of releasing the site. (i)

- For sites where financial assurance has not been provided, alternative arrangements have been approved by the applicable regulators. (ii)

- Financial assurance mechanisms are reviewed and maintained to ensure that they are executable and provide sufficient funding for decommissioning in the event that the licensee liquidates or is otherwise unable to pay for decommissioning. (iii)

Satisfactory, But Needs Improvement (b)

- For most sites, financial assurance is provided for the estimated costs for an independent third party to perform decommissioning with the objective of releasing the site. (i)

- For most sites where financial assurance has not been provided, alternative arrangements have been approved by the applicable regulators. (ii)

Non-Common Performance Indicator 6—Site Decommissioning Management Plan (SDMP) (K) (continued)

Financial Assurance for Decommissioning (3) (continued)

- For most sites, financial assurance mechanisms are reviewed and maintained to ensure that they are executable and provide sufficient funding for decommissioning in the event that the licensee liquidates or is otherwise unable to pay for decommissioning. (iii)

Unsatisfactory (c)

- Financial assurance is not consistently provided for the estimated costs for an independent third party to perform decommissioning with the objective of releasing the site. (i)

- For sites where financial assurance has not been provided, alternative arrangements have not been always approved by the applicable regulators. (ii)

- Financial assurance mechanisms are not being consistently reviewed and maintained to ensure that they would be executable and provide sufficient funding for decommissioning in the event that the licensee liquidates or is otherwise unable to pay for decommissioning. (iii)

Category N (d)

Special conditions exist that provide justification for withholding a rating for one or more evaluation criteria.

Termination Radiological Surveys (4)

Satisfactory (a)

- For nearly all SDMP sites, sufficient radiological surveys are being performed before license termination and site release, as outlined in NRC Inspection Manual, Chapter 2605, to

Non-Common Performance Indicator 6—Site Decommissioning Management Plan (SDMP) (K) (continued)

Termination Radiological Surveys (4) (continued)

ensure that residual radioactivity levels comply with release criteria. (i)

- Licensee survey results are routinely validated through a closeout inspection or confirmatory survey, as outlined in NRC Inspection Manual, Chapter 2605, given the extent and significance of any residual contamination. (ii)

Satisfactory, But Needs Improvement (b)

- For most SDMP sites, sufficient radiological surveys are being performed before license termination and site release, as outlined in NRC Inspection Manual, Chapter 2605, to ensure that residual radioactivity levels comply with release criteria. (i)

- License survey results are usually validated through a closeout inspection or confirmatory survey, as outlined in NRC Inspection Manual, Chapter 2605, given the extent and significance of any residual contamination. (ii)

Unsatisfactory (c)

Sufficient radiological surveys are not consistently being performed before license termination and site release, as outlined in NRC Inspection Manual, Chapter 2605, to ensure that residual radioactivity levels comply with release criteria. Also, survey results are not normally validated through a closeout inspection or confirmatory survey, given the extent and significance of any residual contamination, as outlined in NRC Inspection Manual, Chapter 2605.

Non-Common Performance Indicator 6—Site Decommissioning Management Plan (SDMP) (K) (continued)

Termination Radiological Surveys (4) (continued)

Category N (d)

Special conditions exist that provide justification for withholding a rating for one or more evaluation criteria.

Inspections (5)

Satisfactory (a)

- At nearly all SDMP sites, inspections are carried out in accordance with established frequencies. (i)

- SDMP sites are inspected at least once during decommissioning and at all significant milestones in the decommissioning process, in addition to the closeout inspection before license termination. (ii)

- Inspections are documented and carried out in accordance with NRC Inspection Procedures 87104 and 88104. (iii)

Satisfactory, But Needs Improvement (b)

- At most SDMP sites, inspections are carried out in accordance with established frequencies. (i)

- SDMP sites are inspected at least once during decommissioning and at most significant milestones, in addition to the closeout inspection before license termination. (ii)

- At most SDMP sites, inspections are documented and carried out in accordance with NRC Inspection Procedures 87104 and 88104. (iii)

Non-Common Performance Indicator 6—Site Decommissioning Management Plan (SDMP) (K) (continued)

Inspections (5) (continued)

Unsatisfactory (c)

- Inspections are not consistently being carried out in accordance with established frequencies. (i)

- SDMP sites are not inspected at least once during decommissioning or at significant milestones, in addition to the closeout inspection before license termination. (ii)

- Inspections are not consistently being documented and carried out in accordance with NRC Inspection Procedures 87104 and 88104. (iii)

Category N (d)

Special conditions exist that provide justification for withholding a rating for one or more evaluation criteria.

SDMP Milestones (6)

Satisfactory (a)

- At nearly all SDMP sites, the decommissioning milestones summarized in the SDMP are being met or delays are identified and a mechanism is in place to ensure that any appropriate corrective actions are taken. (i)

- Policy issues affecting decommissioning of SDMP sites are being identified. (ii)

- Staff is updating the SDMP database in a timely manner. (iii)

Non-Common Performance Indicator 6—Site Decommissioning Management Plan (SDMP) (K) (continued)

SDMP Milestones (6) (continued)

Satisfactory, But Needs Improvement (b)

- For most SDMP sites, the decommissioning milestones summarized in the SDMP are being met or delays are identified and a mechanism is in place to ensure that any appropriate corrective actions are taken. (i)

- Staff routinely identify policy issues affecting the decommissioning of SDMP sites in a timely manner. (ii)

- Staff are updating the SDMP database for most sites in a timely manner. (iii)

Unsatisfactory (c)

- The decommissioning milestones summarized in the SDMP are not routinely being met or delays are not being identified and a mechanism is not in place to ensure that any appropriate corrective actions are taken. (i)

- Policy issues affecting the decommissioning of SDMP sites are not typically being identified in a timely manner. (ii)

- Staff are not routinely updating the SDMP database in a timely manner. (iii)

Category N (d)

Special conditions exist that provide justification for withholding a rating for one or more evaluation criteria.

Part IV
Programmatic Assessment

General (A)

A management review board (MRB) will make the overall assessment of each NRC region's or Agreement State's program. Information considered by the MRB includes the proposed final report, recommendations prepared by the team that conducted the review of that region or State, information from periodic meetings in accordance with Office of State and Tribal Programs (STP) Procedure SA-116, “Periodic Meetings With Agreement States Between IMPEP Reviews,” and any unique circumstances. The overall assessment will also include a consideration of information provided by the region or State at the MRB meeting. In addition to a recommended overall finding, the proposed final report will contain the team's recommendations for each common indicator and each applicable non-common indicator for both Agreement States and NRC regions. The MRB may also direct that a program be placed on monitoring, heightened oversight, or that the next IMPEP review or periodic meeting be scheduled earlier. (1)

The MRB will consist of a group of senior NRC managers, or their designees, including— (2)

- Deputy Executive Director for Materials, Research and State Programs as Chair (a)
- Director, Office of Nuclear Material Safety and Safeguards (b)
- Director, STP (c)
- General Counsel (d)

The Organization of Agreement States also will be invited to specify a representative to serve as a member of each MRB, as a nonvoting Agreement State liaison. In this capacity, the State

General (A) (continued)

representative will receive applicable documentation and engage in all MRB discussions. The Agreement State liaison does not have voting authority since this function is reserved solely to NRC. The Agreement State liaison representative is expected to provide an Agreement State perspective on any matter that is voted on by the MRB. (3)

For an NRC region, the MRB will assess only the adequacy of the program to protect public health and safety. For an Agreement State program review, the MRB will assess both adequacy and compatibility. (4)

Adequacy Findings for Agreement State Programs (B)

Finding 1—Adequate To Protect Public Health and Safety (1)

- If the MRB finds that a State program is satisfactory for all performance indicators, the State's program will be found adequate to protect public health and safety. (a)

- If the MRB finds that a State program is satisfactory but needs improvement for one or two performance indicators and is satisfactory for all remaining performance indicators, the MRB should consider whether the State's program is adequate or adequate but needs improvement. (b)

Finding 2—Adequate But Needs Improvement (2)

- If the MRB finds that a State program is satisfactory but needs improvement for one or two performance indicators and is satisfactory for all remaining performance indicators, the MRB should consider whether the State's program is adequate or adequate but needs improvement. (a)

- If the MRB finds that a State program protects public health and safety and is satisfactory but needs improvement for three

Adequacy Findings for Agreement State Programs (B) (continued)

Finding 2—Adequate But Needs Improvement (2) (continued)

or more performance indicators and is satisfactory for the remaining performance indicators, the MRB should give strong consideration to finding the State's program adequate but needs improvement. (b)

- If the MRB finds that a State program protects public health and safety but is unsatisfactory for one or more performance indicators and is satisfactory or satisfactory but needs improvement for the remaining performance indicators, the MRB should give strong consideration to finding the State's program adequate but needs improvement. (c)

- In cases in which previous recommendations associated with indicator findings of adequate but needs improvement have not been completed for a significant period of time beyond the originally scheduled date, the MRB also may find that the program is adequate but needs improvement. (d)

Finding 3—Inadequate To Protect Public Health and Safety (3)

If the MRB finds that a State program is not capable of reasonably ensuring public health and safety for any reason, the MRB will find that the State's program is inadequate to protect public health and safety.

Compatibility Findings for Agreement State Programs (C)

Finding 1—Compatible (1)

If the MRB determines that a State program does not create conflicts, gaps, or disruptive duplication in the collective national

Compatibility Findings for Agreement State Programs (C) (continued)

Finding 1—Compatible (1) (continued)

effort to regulate materials under the Atomic Energy Act, the program will be found compatible.

Finding 2—Not Compatible (2)

If the MRB determines that a State program creates unnecessary gaps, conflicts, or disruptive duplication in the collective national effort to regulate materials under the Atomic Energy Act, the program will be found not compatible.

Adequacy Findings for NRC Regional Programs (D)

The MRB adequacy findings for regional programs will be the same as those listed above for Agreement States.

Guidance for MRB Determinations for Agreement State Programs (E)

For most Agreement State reviews, no action other than issuance of the final IMPEP report is needed. For those infrequent reviews where additional action is needed, the following alternatives should be considered.

Monitoring (1)

When weaknesses in a program result in, or could result in, less than fully satisfactory performance for one or more performance indicators, monitoring by NRC will be considered by the MRB in accordance with STP Procedures SA-122, “Heightened Oversight and Monitoring.” Monitoring is an informal process that allows the NRC to maintain an increased level of communication with an Agreement State program.

Guidance for MRB Determinations for Agreement State Programs (E) (continued)

Heightened Oversight (2)

When one or more of the common and non-common performance indicators are found to be unsatisfactory, heightened oversight by the NRC will be considered by the MRB in accordance with STP Procedure SA-122, “Heightened Oversight and Monitoring.” When strong commitments to improve its program have been made by the Agreement State at the department director management level, the MRB will consider heightened oversight, if the MRB believes the actions by the Agreement State will result in necessary program improvements and the State is capable of implementing those commitments. Heightened oversight could include requests for an Agreement State program improvement plan, periodic Agreement State progress reports, periodic NRC/Agreement State conference calls, and a followup review by the IMPEP team.

Probation (3)

The MRB will consider probation for an Agreement State using the STP Procedure SA-113, "Placing an Agreement State on Probation," as a reference. Probation is appropriate for MRB consideration when the finding for an Agreement State is adequate but needs improvement or is not compatible and any of the following circumstances occur: (a)

- When one or more of the common or non-common performance indicators are found unsatisfactory and are of such safety significance that assurance of the program's ability to protect the public health may be degraded, heightened oversight by the NRC is required, and heightened oversight without a formal declaration of probation may not result in necessary program improvements (i)

- When previously identified programmatic deficiencies have gone uncorrected for a significant period of time beyond which

Guidance for MRB Determinations for Agreement State Programs (E) (continued)

Probation (3) (continued)

the corrective actions had been originally scheduled for completion and the NRC is not confident of the State's ability to correct such deficiencies in an expeditious and effective manner without heightened oversight and a formal probation declaration by the NRC (ii)

- When a program has repeatedly been late in adopting required compatibility elements and only heightened oversight by NRC, together with a formal declaration of probation, would yield improvements (iii)

The following are examples of Agreement State program deficiencies for which the MRB would consider probation for an Agreement State. This list is not all-inclusive and other Agreement State program deficiencies may require consideration. (b)

- Repeated failure to identify design deficiencies in followup analysis of events or incidents involving sealed sources and devices (i)

- Inability to retain skilled staff, resulting in increased backlog in inspections and deficiencies in the technical quality of inspection and licensing programs (ii)

- Inability or difficulty in adopting regulations that could result in significant impacts across State boundaries or allow licensees to be subject to less stringent requirements than the NRC requirements determined to be necessary to satisfy compatibility criteria (iii)

Suspension (4)

The MRB will consider if suspension of an agreement is required to protect public health and safety, or if the State has not complied with one or more of the requirements of Section 274 of the Atomic

Guidance for MRB Determinations for Agreement State Programs (E) (continued)

Suspension (4) (continued)

Energy Act, in accordance with STP Procedure SA-114 "Suspension of a Section 274b Agreement," when any of the following circumstances occur: (a)

- In cases in which the MRB finds that program deficiencies related to either adequacy or compatibility are the kind that require NRC action, the MRB will recommend to the Commission to suspend all or part of its agreement with the State. (i)

- In cases in which the State radiation control program has not complied with one or more requirements of the Atomic Energy Act (i.e., the State program is not compatible with the NRC program and the State has refused or is unable to address those areas previously identified as compatibility concerns) and the noncompatibility is disruptive to the national program conducted by NRC and Agreement States for the regulation of material under the Atomic Energy Act. (ii)

Suspension, rather than termination, will be the preferred option in those cases in which the MRB believes that the State has provided evidence that the program deficiencies are temporary and that the State is committed to implementing program improvements. (b)

Termination (5)

The MRB will consider termination for an Agreement State in accordance with STP Procedure SA-115, "Termination of a Section 274b Agreement," when any of the following circumstances occur: (a)

Guidance for MRB Determinations for Agreement State Programs (E) (continued)

Termination (5) (continued)

- The State radiation control program is found to be inadequate to protect public health and safety and no compensating program has been implemented. (i)

- The State has been on probation for a period of time during which it failed to respond to NRC concerns regarding the State's ability to carry out a program to protect public health and safety. (ii)

- The State radiation control program is not compatible with the NRC program and the State has refused, or is unable, to address those areas previously identified as compatibility concerns and the noncompatibility is significantly disruptive to the national program among NRC and Agreement States for the regulation of material under the Atomic Energy Act. (iii)

The following are examples of situations in which the MRB will consider recommending initiating formal procedures to terminate an agreement. This list is not all-inclusive and other situations may require consideration. (b)

- Significant loss of staff, which includes number of staff or those with critical skills coupled with a State's inability to hire appropriate replacements (i)

- Continual problems that manifest in the State's inability to perform adequate inspections or issue appropriate licenses (ii)

- Inability to adopt compatible program elements over a significant period of time (years) and nationally disruptive regulatory program conflicts, gaps, or duplication exists (iii)

Guidance for MRB Determinations for Agreement State Programs (E) (continued)

Termination (5) (continued)

- Continued probationary or suspension status for a State program beyond the period originally envisioned (iv)

Guidance for MRB Determinations for NRC Regional Programs (F)

If significant adequacy-related concerns are identified in a regional materials program by an IMPEP review, the same criteria for an Agreement State determination should be used by the MRB (i.e., that a program is inadequate to protect public health and safety or is adequate but needs improvement). Program heightened oversight, probation, suspension, and termination are not applicable to regional programs. NRC must implement immediate action to correct regional program deficiencies that are similar to those that would warrant probation, suspension, or termination actions for an Agreement State. A significant weakness that could affect public health and safety or program deficiencies will be addressed by adjustment of priorities and redirection of resources.

Glossary

It is necessary to note that some Agreement States or NRC regions may not define these terms identically. In such cases, the review team will highlight any differences in its review but draw its conclusions and make its assessments based on the definitions used by that State or region at the time of the review.

Allegation. A declaration, statement, or assertion of impropriety or inadequacy associated with regulated activities, the validity of which has not been established. This term includes all concerns identified by sources such as the media, individuals, or organizations, and technical audit efforts from Federal, State, or local government offices regarding activities at a licensee's site. Excluded from this definition are matters being handled by more formal processes such as 10 CFR 2.206 petitions, hearing boards, appeal boards, and so forth.

Concurrence Review. A quality assurance review is an evaluation of the initial safety review and must be performed by a different qualified reviewer. It does not need to be performed to the same level of detail as the initial review. The depth of quality assurance review should be commensurate with the complexity of the application and the potential risks associated with the use of the source or device. This review should ensure that the proposed product meets all applicable regulations and requirements and that appropriate health and safety concerns have been addressed and that the device will be safe under the proposed conditions of use and likely accident situations. The quality assurance review should also ensure that the registration certificate for the source or device is accurate and that it provides information essential for proper licensing of the product.

Fuel Cycle Inspections. The definition of "Inspections" in 10 CFR 170.3 should be used to determine what constitutes a fuel cycle inspection. The term includes both routinely scheduled and reactive inspections.

Glossary (continued)

Incident. An event or condition that has the possibility of affecting public health and safety such as described in 10 CFR or equivalent regulations. Office of State and Tribal Programs Procedure SA-300, "Reporting Material Events," includes a listing of NRC reporting requirements in Title 10.

Materials Inspection. The definitions in 10 CFR 170.3, and in NRC Inspection Manual, Chapter 2800, should be used to determine what constitutes an inspection. In addition, Agreement State hand delivery of new licenses may constitute initial inspections. The term includes both routinely scheduled and reactive inspections.

Materials Licensing Action. Reviews of applications for new byproduct materials licenses, license amendments, renewals, and license terminations.

Overdue Core Inspections. NRC no longer defines the term "core" licensees in NRC Inspection Manual, Chapter 2800. Many States use different definitions. For purposes of this management directive, a core licensee will be defined as new licensees and licensees in Priorities 1, 2, and 3. A core license will be considered overdue for inspection in the following cases:

- A new licensee that has not been inspected within 12 months of license issuance.

- An existing Priority 1, 2 or 3 license is more than 25 percent beyond the interval defined in NRC Inspection Manual, Chapter 2800. (An inspection will not be considered overdue if the inspection frequency has been extended in accordance with NRC Inspection Manual, Chapter 2800, on the basis of good licensee performance.)

Glossary (continued)

- Overdue inspections will not be determined on the basis of any inspection frequencies established by States or regions that are more stringent than those contained in NRC Inspection Manual, Chapter 2800. The frequencies provided in NRC Inspection Manual, Chapter 2800, will generally be used as the yardstick for determining if an inspection is overdue.

U.S. NUCLEAR REGULATORY COMMISSION

DIRECTIVE TRANSMITTAL

TN: DT–98–08

To:	NRC Management Directives Custodians
Subject:	Transmittal of Directive 5.9, "Adequacy and Compatibility of Agreement State Programs"
Purpose:	Directive and Handbook 5.9 are being issued to establish the process NRC staff will follow to determine when a proposed or final program element is required for compatibility or health and safety, and to identify Commission program elements needed for compatibility or health and safety.
Office of Origin:	Office of State Programs
Contact:	Cardelia Maupin, 415–2312
Date Approved:	February 27, 1998
Volume:	5 Governmental Relations and Public Affairs
Directive:	5.9 Adequacy and Compatibility of Agreement State Programs
Availability:	U.S. Government Printing Office, (202) 512–2409 or e–mail internet:amcbride@gpo.gov

Adequacy and Compatibility of Agreement State Programs

Directive 5.9

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Adequacy and Compatibility of Agreement State Programs Directive 5.9

Policy
(5.9–01)

It is the policy of the U.S. Nuclear Regulatory Commission to evaluate Agreement State programs established pursuant to Section 274 of the Atomic Energy Act of 1954, as amended, to ensure they are adequate to protect public health and safety and compatible with NRC's regulatory program.

Objectives
(5.9–02)

- To establish the process NRC staff will follow to determine when a proposed or final Commission regulation or program element should be adopted as a legally binding requirement by an Agreement State and whether adoption is required for the purpose of compatibility or health and safety as set out in the Commission's Policy Statement on Adequacy and Compatibility of Agreement State Programs. (021)

- To identify Commission regulations and program elements that must be implemented as legally binding requirements by an Agreement State to maintain a program that is adequate to protect public health and safety and compatible with NRC's regulatory program. (022)

- To describe how NRC staff should apply provisions of the policy statement to current and future Agreement State regulations and program elements. (023)

Organizational Responsibilities and Delegations of Authority
(5.9–03)

Deputy Executive Director for Regulatory Programs (DEDR)
(031)

As delegated by the Executive Director for Operations, oversees the program to evaluate adequacy and compatibility of Agreement State programs.

Director, Office of State Programs (OSP)
(032)

- Reviews the adequacy and compatibility of Agreement State programs through the Integrated Materials Performance Evaluation Program (Management Directive 5.6, "Integrated Materials Performance Evaluation Program [IMPEP]). (a)
- Reviews, evaluates, and determines, in coordination with other NRC offices, those NRC program elements that an Agreement State should adopt for compatibility or adequacy. (b)
- Assists in the review, evaluation, and determination of those NRC regulations that an Agreement State should adopt as legally binding requirements for the purpose of compatibility or health and safety. (c)
- Coordinates the review of Agreement State regulations and program elements with other NRC offices. (d)

Office of the General Counsel (OGC)
(033)

- Assists in the review, evaluation, and determination of those NRC program elements and regulations that an Agreement State should adopt for the purpose of compatibility or health and safety. (a)
- Advises staff on findings regarding the adequacy and compatibility of Agreement State regulations and program elements. (b)

Director, Office of Nuclear Material Safety and Safeguards (NMSS)
(034)

- Reviews, evaluates, and determines, in coordination with other NRC offices, those NRC regulations that an Agreement State should adopt as legally binding requirements for the purpose of compatibility or health and safety. (a)
- Assists in the review, evaluation, and determination of those NRC program elements that an Agreement State should adopt for the purpose of compatibility or health and safety. (b)

Director, Office for Analysis and Evaluation of Operational Data (AEOD)
(035)

Assists in the review, evaluation, and determination of those NRC program elements and regulations that an Agreement State should adopt for the purpose of compatibility or health and safety.

Regional Administrators
(036)

Assist in the review, evaluation, and determination of those NRC program elements and regulations that an Agreement State should adopt for the purpose of compatibility or health and safety.

Applicability
(5.9–04)

The policy and guidance in this directive and handbook apply to all NRC employees who are responsible for and participate in the review and evaluation of Agreement State regulatory programs or who are involved in development and promulgation of NRC regulations or program elements for byproduct, source, and special nuclear materials.

Handbook
(5.9–05)

Handbook 5.9 describes the criteria and the process that will be used to determine the compatibility and health and safety components of NRC regulations and program elements that an Agreement State should adopt for an adequate and compatible program.

References
(5.9–06)

Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.).

Code of Federal Regulations, Title 10.

Management Directive 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)."

—6.3, "The Rulemaking Process," and its handbook, NUREG/BR-0053, "NRC Regulations Handbook."

NRC "Statement of Principle and Policy for the Agreement State Program; Policy Statement on Adequacy and Compatibility of Agreement State Programs," 62 FR 46517, September 3, 1997.

Adequacy and Compatibility of Agreement State Programs

Handbook 5.9

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Exhibit

Part I
Introduction

Overview (A)

The Commission's Policy Statement on Adequacy and Compatibility of Agreement State Programs sets forth the approach that the Commission will use to determine those program elements that should be adopted by an Agreement State to maintain an adequate and compatible program. This handbook describes the specific criteria and process that will be used to identify the compatibility categories of those NRC program elements that should be adopted by an Agreement State for purposes of compatibility, as well as for identifying those program elements that have a particular health and safety significance. It further describes how NRC staff is to apply the provisions of the policy statement to current and future Agreement State program elements for purposes of compatibility. However, the overall determination of adequacy and compatibility for an Agreement State is made pursuant to Management Directive 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)."

Policy Statement on Adequacy and Compatibility of Agreement State Programs (B)

An Agreement State radiation control program is compatible with the Commission's regulatory program when the State program does not create conflicts, duplications, gaps, or other conditions that jeopardize an orderly pattern in the regulation of agreement material (source, byproduct, and small quantities of special nuclear material as identified by Section 274b. of the Atomic Energy Act, as amended) on a nationwide basis. Compatibility focuses primarily on the potential effects of State action or inaction either on the regulation of agreement material on a nationwide basis or on other jurisdictions. The concept of compatibility does not directly address matters of health and safety within a particular Agreement State; such matters are addressed directly under adequacy. However, many program elements for compatibility may affect public health and safety; therefore, they also

Policy Statement on Adequacy and Compatibility of Agreement State Programs (B) (continued)

may be considered program elements for adequacy. Further, basic radiation protection standards and program elements with transboundary implications, although important for health and safety within the State, should be uniform nationwide for compatibility purposes. (1)

An Agreement State radiation control program is adequate to protect public health and safety if administration of the program provides reasonable assurance of protection of public health and safety in regulating the use of agreement material. The level of protection afforded by the program elements of NRC's materials regulatory program is presumed to be that which is adequate to provide a reasonable assurance of protection of public health and safety. A subset of one of the five elements identified to help provide such reasonable assurance is legally binding requirements addressing protection of public health and safety within the State. (2)

On the basis of the policy statement, NRC program elements (including regulations) can be placed into four compatibility categories. In addition, NRC program elements also can be identified as having particular health and safety significance or as being reserved solely to the NRC. These are summarized below. (3)

Compatibility Category A (a)

NRC program elements in Category A are those that are basic radiation protection standards and scientific terms and definitions that are necessary to understand radiation protection concepts. The program elements adopted by an Agreement State should be essentially identical to those of NRC to provide uniformity in the regulation of agreement material on a nationwide basis.

Compatibility Category B (b)

NRC program elements in Category B are those that apply to activities that have direct and significant transboundary implications. An Agreement State should adopt program elements essentially identical to those of NRC.

Policy Statement on Adequacy and Compatibility of Agreement State Programs (B) (continued)

Compatibility Category C (c)

NRC program elements in Category C are those that do not meet the criteria of Category A or B, but the essential objectives of which an Agreement State should adopt to avoid conflict, duplication, gaps, or other conditions that would jeopardize an orderly pattern in the regulation of agreement material on a nationwide basis. An Agreement State should adopt the essential objectives of the NRC program elements.

Compatibility Category D (d)

NRC program elements in Category D are those that do not meet any of the criteria of Category A, B, or C, above, and, thus, do not need to be adopted by Agreement States for purposes of compatibility.

Health and Safety (e)

These are NRC program elements that are not required for compatibility (i.e., Category D), but that have been identified as having a particular health and safety role (i.e., adequacy) in the regulation of agreement material within the State. Although not required for compatibility, the State should adopt program elements in this category, based on those of NRC, that embody the essential objectives of the NRC program elements because of particular health and safety considerations.

Areas of Exclusive NRC Regulatory Authority (f)

These are NRC program elements that address areas of regulation that cannot be relinquished to Agreement States pursuant to the AEA or provisions of Title 10 of the *Code of Federal Regulations*. These program elements are designated "NRC" and should not be adopted by Agreement States.

Part II

Categorization Criteria

Compatibility Category A* (A)

To be included in Category A, an NRC program element is to be generally applicable and is to be a dose limit or a related concentration or release limit or a scientific term, definition, sign, or label that is necessary to understand basic radiation protection principles (basic radiation protection standard). Basic radiation protection standards do not include constraints or other limits below the level associated with "adequate protection" that take into account permissible balancing considerations, such as economic cost, and other factors. (1)

Examples include, but are not necessarily limited to: (2)

- Public dose limits (e.g., 10 CFR 20.1301) plus any regulation that relates directly to these dose limits (a)
- Concentration and release limits (b)
- Occupational dose limits (e.g., 10 CFR 20.1201) plus any regulation that directly relates to these dose limits (c)
- Dose limits in 10 CFR 61.41 (d)
- Radiation symbol (e)
- Caution signs and labels (f)
- Scientific terms (e.g., conventional and Systeme Internationale units, definitions of types of radioactive material) (g)
- Definitions needed for common understanding (e.g., restricted area, year, stochastic) (h)

* Many program elements for compatibility may affect public health and safety; therefore, they also may be considered program elements for adequacy.

Compatibility Category B* (B)

To be included in Category B, an NRC program element is to be one that applies to activities that have direct and significant effects in multiple jurisdictions. (1)

Examples include, but are not necessarily limited to: (2)

- Transportation requirements (e.g., low level radioactive waste manifests, packaging requirements) (a)
- Requirements for approval of products that are distributed nationwide (e.g., sealed sources and devices) (b)
- Definitions of products (e.g., sources and devices) that licensees routinely transport in multiple jurisdictions (c)
- Content and format of sealed source and device registration certificates. (d)

Compatibility Category C* (C)

To be included in Category C, an NRC program element is to be one, the essential objective(s) of which an Agreement State should adopt to avoid conflicts, duplications, or gaps in the regulation of agreement material on a nationwide basis and that, if not adopted, would result in an undesirable consequence. Definitions of "conflict," "duplication," and "gap" are included in the Glossary of this handbook. (1)

Examples of undesirable consequences include, but are not necessarily limited to: (2)

- Exposure to an individual in a different jurisdiction in excess of the basic radiation protection standards established for compatibility in Category A (a)
- Undue burden on interstate commerce (e.g., additional record-keeping or training requirements) (b)
- Preclusion of an effective review or evaluation by the Commission and Agreement State programs for agreement material with respect to protection of public health and safety (c)
- Preclusion of a practice in the national interest (d)

* Many program elements for compatibility may affect public health and safety; therefore, they also may be considered program elements for adequacy.

Compatibility Category C* (C) (continued)

- Absence or impairment of effective communication (e)
- Lack of minimum level of safety for agreement material—containing products distributed nationwide (f)
- Disruption of the regulation of agreement material on a nationwide basis (g)

Examples of program elements in this category include, but are not necessarily limited to: (3)

- Reports of lost or stolen agreement material or mis-administrations (a)
- Radiation surveys for industrial radiographers and well loggers (b)
- Documents and records required at temporary job sites (c)

Compatibility Category D (D)

NRC program elements that do not meet any of the criteria of Category A, B, or C, above, are Category D and are not required for compatibility purposes.

Health and Safety (E)

An NRC program element that is not required for compatibility and could result directly (i.e., two or fewer failures**) in an exposure to an individual in excess of the basic radiation protection standards in Category A if its essential objectives were not adopted by an Agreement State is identified as having particular health and safety significance. (1)

Examples of such program elements include, but are not necessarily limited to: (2)

- Requirement for irradiator interlocks (a)
- Safety checks for medical teletherapy facilities (b)

* Many program elements for compatibility may affect public health and safety; therefore, they also may be considered program elements for adequacy.

** The concept embodied by "two or fewer failures" is that if the essential objectives of the program element were not adopted and implemented, then an event could occur that would not have taken place were the essential objectives adopted. This alone, or in conjunction with, at most, one other event, could result in exposure of an individual in excess of limits set by basic radiation protection standards.

Health and Safety (E) (continued)

- Package opening procedures. (c)

Exclusive NRC Regulatory Authority (F)

The NRC program elements in this category are those that relate directly to areas of regulation reserved to the NRC by the AEA or the provisions of Title 10 of the *Code of Federal Regulations*. (1)

Examples include, but are not necessarily limited to: (2)

- Issuance of licenses for production and utilization facilities (a)
- Regulation of activities in federal offshore waters (b)
- Issuance of licenses for distribution to exempt persons (c)

Although an Agreement State may not adopt program elements reserved to NRC, it may wish to inform its licensees of certain requirements via a mechanism that is consistent with the particular State's administrative procedure laws, but does not confer regulatory authority on the State. (3)

Examples include, but are not necessarily limited to: (4)

- Agreement State licensee submission to the Commission of nuclear material transfer reports pursuant to 10 CFR 150.16 (a)
- Agreement State licensee compliance with safeguards agreement between the United States and the International Atomic Energy Agency pursuant to 10 CFR 150.17a and 10 CFR Part 75 (b)
- Agreement State licensee submission to the Commission of tritium reports pursuant to 10 CFR 150.19 (c)

Part III

Categorization Process for NRC Program Elements

The protocol to be used to assign a compatibility category to NRC program elements or to identify a program element as having particular health and safety significance is diagramed in the flow chart in the exhibit of this handbook. The basis of the flow chart is a series of questions that are listed below. Each program element is tested by asking the series of questions below in the order given. The answers to these questions determine the compatibility category for each NRC program element or identify it as having particular health and safety significance.

Question (1)—Do the essential objectives of the program element address a regulatory area reserved solely to the authority of the NRC? If the response to the question is "yes", the compatibility category is "NRC." If the response to the question is "no," then proceed to Question (2). (A)

Question (2)—Do the essential objectives of the program element address or define a basic radiation protection standard as defined by the Policy Statement or is it a definition, term, sign, or symbol needed for a common understanding of radiation protection principles? If the response to this question is "yes", the compatibility category is "A." If the response to the question is "no", then proceed to Question (3). (B)

Question (3)—Do the essential objectives of the program element address or define an issue that has a significant, direct transboundary implication? If the response to this question is "yes", the compatibility category is "B." If the response to the question is "no", then proceed to Question (4). (C)

Question (4)—Would the absence of the essential objectives of the program element from an Agreement State program create a conflict or gap? If the response to this question is "yes", the compatibility category is "C". If the response to the question is "no", then the compatibility category is "D" and proceed to Question (5) to determine whether the program element should be identified as having particular health and safety significance. (D)

Question (5)—Would the absence of the essential objectives of the program element from an agreement state program create a situation that could directly result in exposure to an individual in excess of the basic radiation protection standards found in compatibility category A? If the response to this question is "yes", the program element is not required for purposes of compatibility, but is identified as having particular health and safety significance. (E)

Part IV

Applicability to NRC Program Elements

Current NRC Program Elements (A)

The compatibility category and identification of particular health and safety significance for current Commission program elements that are applicable to the regulation of agreement materials are found in the Office of State Programs (OSP) Internal Procedure B.7 (Revision 1), "Compatibility Categories and Health and Safety Identification for NRC Regulations and Other Program Elements." This procedure will be updated periodically as final rules are published.

Future NRC Regulations and Other Program Elements (B)

The compatibility category or identification of particular health and safety significance of a proposed rule is to be suggested at the time the rulemaking plan is formulated and is to be coordinated with the Agreement States according to Management Directive 6.3, "The Rulemaking Process." Staff are to use this handbook to determine the compatibility category or to identify particular health and safety significance for each draft rulemaking plan. OSP Internal Procedure B.7 will be revised to incorporate the results of these determinations after the final rule or program element is adopted.

Part V

Applicability to Agreement State Program Elements

Current Agreement State Program Elements (A)

Regulations (1)

NRC regulations that had not been required for compatibility according to the Office of State Programs (OSP) Internal Procedure B.7, "Criteria for Compatibility Determinations," but, pursuant to the Policy Statement on Adequacy and Compatibility of Agreement State Programs, are included in compatibility Categories A, B, or C or are identified as having health and safety significance should be adopted by the States with an effective date within 3 years of the effective date of the policy statement and implementing procedures. (a)

NRC regulations that had been required for compatibility according to OSP Internal Procedure B.7, but will **not** be required under the policy statement do not require any action by the States. (b)

In addition to the foregoing, if an Agreement State's regulations had been evaluated using OSP Internal Procedure B.7 and NRC's program review procedures before the effective date of the policy statement and found: (c)

- To be compatible, then no further action is required by the State except in the special circumstance where the compatibility category now requires the State to be essentially identical (e.g., a change from Division 2 to Category B) and the State regulation is not so deemed, then the State should conform the regulation as expeditiously as possible, but not later than 3 years after the policy's effective date (i)

Current Agreement State Program Elements (A) (continued)

Regulations (1) (continued)

- To be **not** compatible, then the regulation deemed not compatible should be changed to conform to the policy as expeditiously as possible, but not later than 3 years after the policy's effective date (ii)

- Not to have adopted a regulation previously required for compatibility and still required by compatibility Category A, B, or C or identified as having health and safety significance, then the regulation should be adopted as expeditiously as possible, but not later than 3 years after the policy's effective date or other date set by the Commission (iii)

Program Elements (2)

Program elements other than regulations had not been identified previously for purposes of compatibility or for having health and safety significance. Such program elements now identified under the policy statement should be adopted and implemented by the States within 6 months of the effective date of the policy statement and implementing procedures. If, due to other factors, an Agreement State cannot adopt and implement such a program element within the 6-month timeframe, then the State and the Commission will agree upon a mutually acceptable timetable for adoption and implementation.

Future Agreement State Program Elements (B)

General (1)

Any changes to Agreement State program elements after the effective date of the policy statement should conform to the policy and implementing procedures set out in this handbook.

Future Regulations (2)

Proposed and final Agreement State regulations for agreement materials that will be submitted to the NRC will be reviewed in accordance with guidance provided in OSP Internal Procedures, D.7, "Reviewing State Regulations," and B.7 (Revision 1), "Compatibility

Future Agreement State Program Elements (B) (continued)

Future Regulations (2) (continued)

Categories and Health and Safety Identification for NRC Regulations and Other Program Elements." Results of the evaluation will be transmitted to the State in accordance with OSP internal procedures. **Note:** The overall determination of the adequacy and compatibility of individual Agreement State programs will be made in accordance with Management Directive (MD) 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)."

Future New or Changed Program Elements (3)

NRC staff will review the adoption and implementation of any new or revised (non-regulation) program element by an Agreement State in accordance with the review procedures set out in MD 5.6 at the time of the next regularly scheduled review.

Evaluation of Applications for Agreement State Status (C)

NRC staff will apply the compatibility and health and safety categorization criteria and process in this handbook when reviewing the regulations and program elements contained in applications for Agreement State status submitted after the September 3, 1997, effective date of the policy statement.

Part VI

Additional Implementing Issues

Use of Management Directive 5.9 (A)

The overall determination of adequacy and compatibility of individual Agreement State programs will be made in accordance with Management Directive 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)." However, for IMPEP reviews, the review teams will use this handbook to assess the status of the State's program elements with regard to those that should be adopted for compatibility or for health and safety reasons. Specific Agreement State regulations will be assessed as they are submitted by the State and a summary report will be provided to the IMPEP review team at the time of the State's next program review.

Essential Objectives (B)

The essential objective of each NRC program element in compatibility Category C or identified as having particular health and safety significance should be adopted by the Agreement State. The term "essential objective" is defined in the Glossary to this handbook. (1)

For those NRC program elements in compatibility Category C, adoption of the essential objective(s) by an Agreement State means that the State is compatible with regard to that program element. (2)

For those NRC program elements identified as having particular health and safety significance, adoption of the essential objective(s) by an Agreement State means that the State is providing a level of protection equivalent to NRC with respect to that program element. A State has the latitude to adopt essential objectives that are more stringent. (3)

Essentially Identical (C)

Program elements in compatibility Categories A and B adopted by Agreement States should be essentially identical. The term "essentially identical" is defined in the Glossary to this handbook. If a requirement adopted by an Agreement State differs in any significant respect from that of the NRC, the State should explain how the requirements are essentially identical. An example of a substitution that would not be considered significant would be use of the term "deterministic" in place of the term "nonstochastic." In this case, the former term is one commonly accepted in the international radiation protection community. Similarly, the use of Systeme Internationale (SI) units rather than conventional units would be deemed essentially identical. Further, the adoption by States of more recent technical information (e.g., with regard to reference man) would be viewed as being essentially identical. Finally, changes to reflect increased scope of State authority (e.g., use of the term "radioactive material" in place of the term "byproduct material") or wording needed to conform to State administrative procedures (e.g., use of State agency name in place of "Commission") would not be considered significantly different.

Legally Binding Requirements (D)

Where appropriate, Agreement States should adopt program elements in compatibility Categories A, B, and C or those identified as having particular health and safety significance and applicable to all licensees in the form of a rule or other generic legally binding requirement in a manner consistent with the State's administrative laws. The use of generic requirements will help to avoid inconsistency and confusion that may result from the imposition of individual requirements on a case-by-case basis. (1)

Further, requirements applicable to more than a few licensees also should be adopted in the form of a generic requirement. However, since the appropriate approach to such issues will depend on the types and numbers of licensees involved, the State's approach will be reviewed on a case-by-case basis. (2)

The mechanism used by the State should be legally binding on the licensee(s) and enforceable as law. Examples of such legally binding requirements may include license conditions (including licensee commitments referenced in "tie-down" conditions), orders or other mechanisms determined by the State to be legally binding and enforceable. The State has the responsibility of demonstrating that requirements adopted other than by regulation are legally binding. (3)

Timeframes for Adoption (E)

Commission regulations that should be adopted by an Agreement State for purposes of compatibility or health and safety should be adopted in a timeframe such that the effective date of the State requirement is not later than 3 years after the effective date of NRC's final rule (September 3, 1997). Certain circumstances (e.g., adoption of a basic radiation protection standard or other rule that will have significant impact on the regulation of agreement material on a nationwide basis, such as the low-level radioactive waste manifest) may warrant that the effective dates for both NRC licensees and Agreement State licensees be the same. In some cases, and with sufficient justification, health and safety considerations may warrant adoption by the States in less than the recommended 3-year (or 6-month) timeframe. (1)

Program elements, other than regulations or equivalent legally binding requirements, that have been designated as necessary for maintenance of an adequate and compatible program should be adopted and implemented by the Agreement States within 6 months of such designation by NRC. If, due to other factors, an Agreement State cannot adopt and implement such a program element within the 6-month timeframe, then the State and the Commission will agree upon a mutually acceptable timetable for adoption and implementation. (2)

Glossary

Conflict. The essential objectives of regulations or program elements are different and an undesirable consequence is likely to result in another jurisdiction or in the regulation of agreement material on a nationwide basis.

Duplication. Identical regulations or program elements apply to the same material at the same time. Note: this definition applies primarily to review of Agreement State regulations.

Essential objective (of a regulation or program element). The action that is to be achieved, modified, or prevented by implementing and following the regulation or program element. In some instances, the essential objective may be a numerical value (e.g., restriction of exposures to a maximum value) or it may be a more general goal (e.g., access control to a restricted area).

Essentially identical. The interpretation of the text must be the same regardless of the version (NRC or Agreement State) that is read.

Gap. The essential objectives of NRC regulations or program elements are absent from the Agreement State program and an undesirable consequence is likely to result in another jurisdiction or in the regulation of agreement materials on a nationwide basis.

Practice. A use, procedure, or activity associated with the application, possession, use, storage, or disposal of agreement material. The term "practice" is used in a broad and encompassing manner in the Policy Statement on Adequacy and Compatibility of Agreement State Programs. The term encompasses both general activities involving use of radioactive materials such as industrial and medical uses and specific activities within a practice such as industrial radiography and brachytherapy.

Glossary (continued)

Program element. Any component or function of a radiation control regulatory program, including regulations and/or other legally binding requirements imposed on regulated persons, that contributes to implementation of that program.

Transboundary. Across jurisdictional boundaries within the United States. It does not mean between the United States and other nations.

Exhibit
Flow Chart